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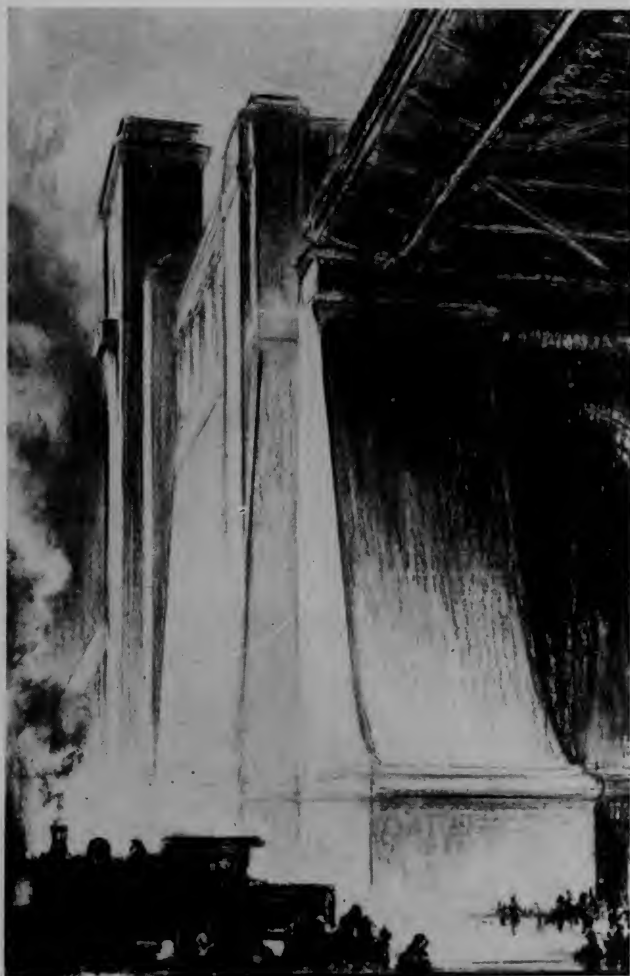
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DELAWARE RIVER BRIDGE PIER

Policies+Personnel=Publicity

Waldo

PUBLICITY METHODS FOR ENGINEERS

PUBLICITY METHODS FOR ENGINEERS

*The PROCEEDINGS of the FIRST
NATIONAL CONFERENCE ON
PUBLIC INFORMATION held under
the auspices of the AMERICAN ASSO-
CIATION OF ENGINEERS. Edited
and amended for more easy reading.*



The objects of the Association shall be to promote the social and economic welfare of the engineer and to stimulate and encourage public service in the engineering profession.

AMERICAN ASSOCIATION OF ENGINEERS
63 EAST ADAMS STREET, CHICAGO

Bus.

23-33779

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First Edition

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CHICAGO

14 Apr. 11, 1923
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PREFACE

The purpose of this book is to make plain the principles of presenting to the public information about engineers, and to show by cases how this is being accomplished. The book is based upon papers read at the First National Engineering Conference on Public Information held by the American Association of Engineers in Chicago in 1921. Every man who presented a paper was a recognized authority.

In these days of general knowledge and quick exchange of information, public opinion influences most undertakings to such an extent that without its support few succeed, while none can withstand its opposition. The best public servants do not allow public opinion to drift in direction or scope; they mold and aggressively direct it like any other energy for the public weal.

With methods available, each must discover opportunities. Take, as an example, the engineer in the constantly expanding highway program. He is charged with the responsibility as manager of a big public business involving the expenditure of probably one thousand million dollars or more in the next few years. If his employer, the public, is to be fully served it must have a sympathetic understanding of the work. At every opportunity, therefore, the detail as well as the ensemble of the huge organization should be presented to the public. Every

PREFACE

public service presents measurably equal opportunities to that in the highway field. It is the duty of the public servant to report to his employer and keep him informed.

The excellent educational material presented at the Conference has been edited to eliminate duplication and make easy reading in a handbook. This work was under the direction of C. R. Thomas, who is also responsible for the general method of presentation, part of Chapter V, Chapter VI, the Appendices, and illustrating and printing the book. The editing for duplication and detailed arrangement is the work of C. S. Darling. Acknowledgment is also made to *Fire and Water Engineering*, *Printers Ink Monthly* and *Railway Age* for the use of illustrations on advertising.

It is a privilege to express here the gratitude of those who use this book to all who have contributed without thought of pay other than that arising from the satisfaction of having rendered a public service.

C. E. DRAYER, D. Sc.

Secretary, American Association of Engineers.

Chicago, Illinois,
February 1, 1922.

The First National Engineering Conference on Public Information

The First National Engineering Conference on Public Information was held under the auspices of the American Association of Engineers in Chicago, Illinois, on February 25, 1921, at the Congress Hotel.

Papers and discussion presented at this Conference included the following:

Some Problems Before the Engineer

By J. G. D. Mack,
State Chief Engineer of Wisconsin

Graduate, Rose Polytechnic Institute, Mechanical Engineering, 1887; M. E., Cornell, 1888; General engineering practice, 1888-93; Instructor, College of Engineering, University of Wisconsin, 1893-95; Assistant Professor, Machine Design, 1895-1903; Professor, Machine Design, 1903-1915; Mechanical Engineer, Railroad Commission of Wisconsin, 1903-1912; made first valuation railroad rolling stock, tools, and equipment in Wisconsin, 1903-04. Later general public utilities valuation; State Chief Engineer, Wisconsin State Department of Engineering in charge of all State engineering and architectural work since 1915; Member and Secretary, Wisconsin Deep Water Ways Commission; Director, National Rivers and Harbors Congress; Member, Minnesota-Wisconsin Boundary Line Commission. Member A. S. M. E.

PUBLICITY METHODS FOR ENGINEERS

A National Program of Public Information

By *W. W. DeBerard*,
Western Editor, Engineering News-Record

For twelve years western editor, *Engineering Record* and *Engineering News-Record*, and in touch with engineering development throughout the Middle West. Graduate in chemistry, Beloit College, and in sanitary engineering, Massachusetts Institute of Technology. Engaged on water supply work and sanitary work for ten years prior to entering editorial work, including work in the city of Oakland, California; Philadelphia, Pennsylvania; Harrisburg, Pennsylvania; Columbus, Ohio; and Denver, Colorado; and on the Metropolitan Sewerage Commission of New York, New York. Mr. DeBerard is a member of several engineering societies.

The Meaning and Purpose of Publicity

By *Ivy L. Lee*,
Adviser in Public Relations to the Pennsylvania Railroad and Other Interests

Adviser in public relations. Has been actively engaged in public information and relations work since 1903, including work for the Anthracite Coal Operators, Pennsylvania Railroad, John D. Rockefeller, Red Cross Council, Interborough Rapid Transit, and as European Manager for Harris Winthrop & Co., bankers. Now in organization of Ivy L. Lee & Associates, 61 Broadway, New York. Has written much on economic subjects and was lecturer in the London (England) School of Economics.

Making Publicity Out of Policies

By *Richard H. Waldo*,
Publisher of Hearst's International, New York
Formerly business manager of *Good Housekeeping*; secretary and associate general manager of the *New York Tribune*. Two years with the A. E. F. as War Risk Insurance Officer, London, England. Business

FIRST NATIONAL CONFERENCE

Manager, *Stars and Stripes*, Paris. Captain Co. I, 111th Infantry, 28th Division. Secretary, Inter-Allied Games Committee, Paris. Recently adviser on publishing and publicity matters, including the Inter-Racial Council, Associated General Contractors, and Cleveland Industrial Association.

The Public Debt to the Engineer

By *F. M. Feiker*,
Assistant to the Secretary of Commerce,
U. S. Department of Commerce

Graduated Worcester Polytechnic Institute in 1904. Served the General Electric Company as technical journalist and later joined the A. W. Shaw Company in Chicago, where he developed *Factory Magazine* and later became chairman of the editorial board of all the A. W. Shaw Publications. He joined the McGraw-Hill publications in New York in 1915, as editor of *Electrical World* and later established *Electrical Merchandising*. Later he was made chairman of the board of editors of the thirteen publications of the McGraw-Hill Company and then vice-president. He is a member of numerous technical societies.

Ambassadors to His Majesty the Public—Publicity Organization and Methods

By *C. R. Thomas*,
In charge of Public Information and Professional Engineer, American Association of Engineers

Entered engineering promotional work with the U. S. Bureau of Public Roads. Research engineer and teacher of engineering at Pennsylvania State College and North Carolina State College. Associate editor of *Engineering and Contracting*. Editorial director and first editor of *Successful Methods*. Later Cleveland advertising manager, Manufacturers' Publicity Bureau. In charge of review and publication of results, U. S. Forest Products Laboratory. Contributor to general magazines.

PUBLICITY METHODS FOR ENGINEERS

The Difference Between Publicity and News

By Harvey V. Dewell,
Day City Editor, The Chicago Tribune

Born in Brooklyn, New York. Has been engaged in newspaper business for about ten years in Denver and Chicago. At present day city editor of *The Chicago Tribune*.

Engineering Information Service in Iowa

By R. W. Crum,
Engineer of Materials and Tests, Iowa State Highway Department

Graduated in engineering from Iowa State College in 1907 and entered professional civil engineering work with the Pennsylvania Lines in 1907. The following year he became associate professor in charge of the testing laboratories at Iowa State College and continued in this work until 1919, when he was appointed engineer of materials and tests, Iowa Highway Commission, in charge of all matters pertaining to the use of materials in work under the jurisdiction of the highway commission. In 1908-09 he engaged in private practice in general civil engineering.

Public Information in the Municipal Field

By S. C. Hadden,
Editor and Publisher, Municipal and County Engineering

For many years he was engaged on the editorial staff of *Engineering and Contracting* and other papers. Active in engineering organization work.

The Essentials of Popular Scientific Writing

By Alexander Black,
Editor, King Features Service, New York.

Author of the novels "The Great Desire," and "The Seventh Angel," and of a new volume of essays, "The

FIRST NATIONAL CONFERENCE

Latest Thing, and Other Things"; a newspaper editor for forty years, particularly in the Sunday feature field. Now editor of King Features Service which serves hundreds of newspapers from coast to coast. Born in New York City, which has been the scene of most of his novels and of all his newspaper activities. Known as "the grandfather of the picture play" from the circumstance of his having written, photographed and produced the first drama for the screen in 1894, before the advent of the motion picture.

Making Easy Reading of Engineering Subjects

By C. S. Darling,
Editor, Rock Products

B. S. in Civil Engineering, Worcester Polytechnic Institute. With editorial staff of *Factory*, A. W. Shaw Company, Chicago, since July 9, 1917, except during the period of the War when he rose from the rank of private to captain in the Corps of Engineers in France. Managing editor of *Factory* from July, 1920, to February, 1922. Editor, *Rock Products*.

The Value to a Young Engineer of Technical and Engineering Press Contributions

By C. A. Tupper,
President, International Trade Press, Chicago

Consulting engineer and publisher of various engineering journals. After finishing courses in mining, mechanical, and electrical engineering was engaged in field work and identified with large machinery manufacturing interests for twenty years, during which he travelled and worked in all parts of the world. In 1911 he was made secretary of the Penton Publishing Company and later became president of the International Trade Press of Chicago.

PUBLICITY METHODS FOR ENGINEERS

What Publicity Does for the Chapter

By R. C. Bailey,
*Assistant Secretary, American Association
of Engineers*

Mechanical and electrical engineer with over twenty years' experience in steam power plant design and industrial plant work in eastern United States. During the war was Expert Aide in the New York Navy Yard and later was president of the Navy Technical Association. Joined the staff of the American Association of Engineers in 1919 and became in succession, District Secretary, Assistant Secretary, and Office Manager of the National Office.

Local Publicity Methods

By Cedric B. Smith,
*Advertising Manager, Chicago
Bridge and Iron Works*

Born in Monticello, Iowa, employed on engineering work with Oregon Trunk, Great Northern, and Chicago Great Western Railroads. University of Minnesota, B. A., 1914, B. S. in E., 1915. Various engineering positions, 1915, 1916, 1917 with Commerce Commission and Pennsylvania Lines. First Lieutenant, U. S. Army, 1917-1918. Editor, *Professional Engineer*, and on promotional work for American Association of Engineers, 1919-1920.

Teaching Engineering Journalism at Iowa State College

By H. E. Pride,
*Bulletin Editor, Iowa Engineering
Experiment Station*

Graduated in engineering at Iowa State College and served as an instructor in Officers' Training Camps, reaching the rank of Captain, Coast Artillery. After a short period as assistant to the president, Lock Joint Pipe Company, he returned to Iowa to assist in establishing instruction in journalism for engineering students at Iowa State College.

FIRST NATIONAL CONFERENCE

Typical Engineering Publicity

By C. E. Drayer,
Secretary, American Association of Engineers

Pioneer in engineering organization and engineering publicity. Organized Committee on Cooperation, made up of local, state and national engineering societies. Secretary, Cleveland Engineering Society, and co-editor of "Engineering as a Career." Became secretary of the American Association of Engineers in 1918. Awarded honorary degree of Doctor of Science by Ohio Northern University for public service. Graduated from Western Reserve University and held various engineering positions in railroad service before taking up engineering organization work.

Educating the Public About Engineering Work

By F. H. Newell,
Consulting Engineer, Washington, D. C.

Graduate Massachusetts Institute of Technology, 1885. Engaged in mining and miscellaneous engineering for several years, and then with the U. S. Geological Survey 1888 until 1907 when he became the first director of the U. S. Reclamation Service and served in that capacity for seven years. Professor of civil engineering, University of Illinois, 1914-19. President, American Association of Engineers, 1919-20, during period when the membership increased from 4,000 to 18,000. Member of numerous technical societies, the author of many books, and has served in advisory capacity for important commissions.

CONTENTS

CHAPTER	PAGE
I SOME REASONS FOR PUBLICITY	I
Do Something—Then Tell About It.	
Engineers Have "Done Something."	
The Difference Between Publicity and No Publicity.	
What Publicity Will Do for Engineers.	
How Greater Service Results.	
Where the Economic Side Enters.	
Correcting Wrong Impressions.	
A Counter-Fire of Publicity.	
Roosevelt's Plan.	
How Press Contributions Help the Young Engineer.	
II THE RIGHT CONCEPTION OF PUBLICITY	17
Molding Public Opinion.	
Publicity, Press Agency, Propaganda, and Public Information Work.	
The Place of Public Information Work.	
Public Service is the Basis of Public Notice.	
The Engineer's Opportunity for Publicity.	
Information Must be Valuable and Useful.	
The Public's Debt to the Engineer.	
The Difference Between Publicity and News.	
Pick Real News in Seeking Newspaper Publicity.	
An Example of News Value.	
Areas of Interest in Selecting News.	
The Editor May Know More About His Job Than You Do.	

PUBLICITY METHODS FOR ENGINEERS

CHAPTER	PAGE
III WAYS AND MEANS THAT BRING PUBLICITY . . .	35
- What the Public Wants. - Central Publicity Bureaus—National and Local. - What One State Organization is Doing. - Some Suggestions from Iowa's Experience. - Developing Volunteer Service. - Many Agencies Are Available. - Do Something—Then Tell About It. - Methods in Use. - Mapping Out a Campaign. - The Personal Appeal. - When to Begin. - Publicity for Ideas, Rather than for Men. - Publicity from Government Bureaus. - A Clip Sheet for Editors. - What a Central Publicity Organization Can Do.	
IV GETTING NEWS IN THE NEWSPAPERS	63
- The Most Important Publicity Medium. - Learn to Write Non-Technically. - We All Speak Two Languages. - Two Kinds of Newspaper Articles. - Learning to Recognize News Value. - How to Select News. - Write So John Smith Can Understand. - Picking the Points of News Value. "Turning the News." - How Material Gets in a Newspaper. - Areas of News Interest. - Remember Your Audience. - The Situation of the Newspaper Reader. - To Write Interestingly. - Say It; Don't Write It. - Writing a Newspaper Article. - Steps in Building the Story. - A Good Way to Construct the Story.	
XVI	

CONTENTS

CHAPTER	PAGE
- How to Write for Magazines. - Making Interesting Reading of Engineering Subjects.	
V THE PUBLICITY MAN, AND WHAT HE NEEDS TO KNOW	95
- Picking the Publicity Man. - The Need for Voluntary Effort. - Some Special Jobs for the Public Information Man. - Don't Be Too Modest. - Contacts with Civic Organizations. - Don't Clog the Channels. - Newspaper Syndicates. - Hints on Organization. - Convention Exhibits. - Motion Pictures. - An Educational Motion Picture Syndicate. - Stipulation for Free Film Service. - Producing Motion Pictures. - Suggestions on Exhibiting Motion Pictures. - Operating a Speaker's Bureau. - Furnishing Speakers to the Public. - Handling Announcements. - Committee Memberships in Local Organizations. - Personal Work of Organizers. - Mass Meetings. - Receptions to Special Groups. - Technical Methods. - Service Precedes Publicity. - The Fundamental Object—To Improve the Environment in Which People Live.	
VI TYPICAL PUBLICITY PROBLEMS	123
- Engineers' Week in a Small Town. - Promoting a National Highway.	
XVII	

PUBLICITY METHODS FOR ENGINEERS

CHAPTER	PAGE
Planning a Pageant of Progress.	
Campaign for Rehabilitating a City Water System.	
Promoting a County Bond Issue.	
Developing a Local Engineering Society.	

APPENDIX I

SOME APPROXIMATE COSTS FOR ESTIMATING	163
The costs given here are those existing in Chicago, Illinois, in January, 1922; they are approximate and should only be used for rough estimating.	
1. Addressing and Typewriting Costs.	
2. Folding and Mailing.	
3. Multigraphing.	
4. Mimeographing.	
5. Some Typical Job Printing Costs.	

APPENDIX II

A BRIEF OUTLINE OF A WORKING PLAN FOR PUBLIC INFORMATION TO BROADEN THE FIELD OF ENGINEERING WORK	167
RESEARCH INFORMATION SERVICE	187

PUBLICITY METHODS FOR ENGINEERS

CHAPTER I

SOME REASONS FOR PUBLICITY

Do Something—Then Tell About It. Where there is public service public notice may be expected to follow. Do something—then tell about it. That is a rule for publicity which applies to engineers and to everyone else. Without first doing something—not necessarily something unusual or out of the ordinary, but anything which affects the lives of other people and about which they will be interested to hear—there can be no effective spreading of information to the dozens or thousands or millions who form the particular part of the "public" to whom the information may be valuable. A scientist discovers a cure for cancer, the American First Army takes St. Mihiel, a new bridge is planned south of town, and there is publicity, by word of mouth, by newspapers, by magazines, by motion pictures, and by numerous other mediums. The publicity from paid advertising also is preceded by something done—something made or planned for sale, or some achievement whose telling will bring profit, prestige, or other advantage to him who tells it.

Engineers Have "Done Something." Every day men come in direct contact with engineering achievements. They drink the water that engineers have brought to their doors, they ride in the rail-

roads that engineering genius has created, they cross over or beneath rivers on paths which engineers have built for them, they exist and grow rich by trade in the metals and materials which engineering labors have wrested from the bowels of the earth.

There is no lack of the "do something" requirements of our publicity rule; what remains is to tell about it.

One reason so few engineers tell about their work in a way that gives the telling a real publicity value is that they haven't seen how much good can result to themselves, to the people with whom they are associated, and to everyone in general, from such publicity.

The Difference Between Publicity and No Publicity. When the Norsemen discovered America, they had no compass. Yet the compass had been discovered by the Chinese thousands of years before.

When, however, Mme. Curie discovered radium, the knowledge of her achievement was spread throughout the world as rapidly as cables and wires could carry it. Mme. Curie's work would have been of no value to the world at large if the knowledge of her discovery had remained with her alone.

The difference between those earlier times and these is the difference largely of ways and means of publicity. No engineering work need be unknown today. The material is at hand. Sound principles are clear. It is only a matter of going at it.

Through publicity the engineer can increase his usefulness, just as publicity has increased the usefulness of radium to the world.

What Publicity Will Do for Engineers. The objects of the American Association of Engineers are "to promote the social and economic welfare of the engineer and to stimulate and encourage public service in the engineering profession."

What has publicity to do with the achievement of these objects?

Publicity gets things done by carrying a truthful message to the mass of the people. It lines up public sentiment on the side of the right by showing the inwardness of great questions on which, without publicity, the people would not be well informed. It gets people behind constructive business, philanthropic, and moral movements; it brings enlightenment on great public questions, and it is the most dreaded of all forces by the evil doer and the criminal.

It was not so many years ago that public utility corporations such as railroads, traction lines, gas, electric light, and telephone companies were targets of almost universal condemnation wherever they operated. Today the public has a much better idea of public utility corporations. We do not find them universally condemned. People have a clearer understanding of their problems, and this understanding has been brought about through a changed policy of dealing with the public, the basis of which has been public service adequately reported through publicity.

How Greater Service Results. When an engineer first hears someone speak of publicity, he often sees no other purpose for having engineering events and news of engineers chronicled in the press than the pleasure of getting one's name in the paper. As a matter of fact, the reasons for obtaining publicity are just as definite and substantial as for maintaining an employment service. A simple definition of publicity is this:

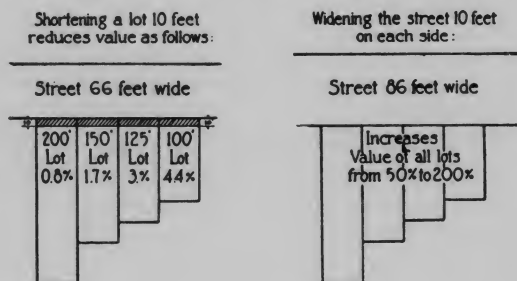
Engineering publicity is anything concerning engineers or engineering which is brought to the attention of the public.

Publicity is actually nothing more nor less than the broader view of advertising—we all know the value of advertising. “Eventually—why not now” spells Gold Medal Flour to nine men out of ten, Grape Nuts means breakfast food to almost everyone. These names and expressions have been developed through advertising. If the American Association of Engineers had for sale a breakfast food it would be unable to market its product in sufficient quantities to make the project a paying one without a strong campaign of advertising. The Association does not have a breakfast food for sale, but it has some other things far more important to mankind.

In the first place, there are services to sell—the services of every individual engineer and of engineers in general. Publicity will enhance the value of these services. We expect the profession to accomplish considerable good in legislative matters and in politics. It is obvious that the better known

the local engineering organizations are in the eyes of other citizens the more force will the organizations and the individual engineers have in politics. To aid this work, it is necessary to build up a repu-

Profit and Loss in Street Widening



The average owner can give the land required for street widening and reap 10 fold to 100 fold profits on his investment.

Poster used in a city zoning campaign in Cleveland, Ohio.

tation—a reputation for honesty, high ideals, vision, common sense, patriotism, unselfishness, scientific knowledge, ability to see and interpret properly the events in our communities which affect men in general. This reputation can be established in the public mind by publicity.

If someone asks which department store in the United States enjoys the greatest reputation for fair dealing, for a high standard of merchandise, and an almost unquestioned honesty with its customers, eight out of ten in nearly any gathering of informed men name Wanamaker's of Philadelphia and New York. The reputation of this mercantile institution was built up not alone because it has been conducted with the highest principles of fair dealing between a merchant and his customers, but because these principles of fair dealing have been emphasized in paid advertising and through other publicity.

If it were not for publicity the ideal of service which John Wanamaker incorporated in his little store on Chestnut Street would be known only to Philadelphians and only a limited number would have been able to take advantage of his service. Through the printed word his reputation has extended over the English speaking world.

Without publicity the American Association of Engineers will enjoy a limited reputation and can perform a limited service. Through publicity, its underlying motives, its practical vision of the necessity for professional and social progress, its capacity for service to the individual, to the profession, to the country, will be increased many fold. That is the reason for publicity.

Where the Economic Side Enters. The statement was previously made that engineers have to sell their services, and publicity makes evident the value of these services. As the value is increased,

so will the individual compensation for these services be augmented. When the public comes to know and estimate engineering accomplishment at its true value to society the economic status of engineers will become fixed. Whether or not it will stay fixed or be raised will depend upon how the engineers themselves measure up to their opportunities in the service of the world. The first part of the problem is to inform the public concerning the processes and results of engineering effort so that society may appraise the value of the engineer's daily work. The second part of the problem is to show the way to engineers to become of more value to society by applying their valuable training in the manifold problems of civilized life.

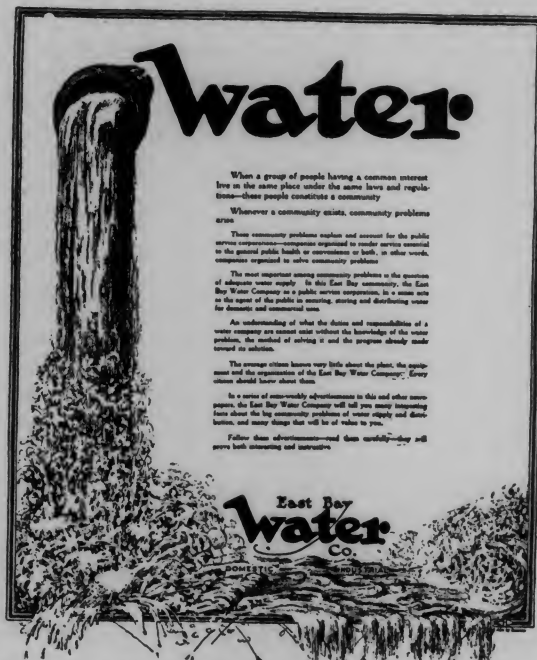
While the value of strictly engineering accomplishment is probably fixed at some point in the sum total of human effort, there need be no limit to the relative place engineers themselves may attain in this sum total.

If the public be well acquainted with the background of the engineer's work there can be no doubt that he will be appraised at his true worth in whatever sphere of influence his activities may occur.

Correcting Wrong Impressions. There is often a need in engineering publicity work for more than a mere educational form of publicity. Engineers are frequently attacked when they are in municipal and other public work and these attacks are often partly or wholly unjust.

Proper publicity can do much to counteract the

insidious influence which is so often found in many civic organizations, and in the newspapers, to discredit engineers in municipal work. Many who



"Advertising is the backbone of publicity." The first of a series of educational advertisements inserted in California newspapers.

belong to civic organizations and serve on committees know that insinuations and open charges are indulged in against the engineers engaged in

public work. Yet it is rare that an engineer engaged in public work is not a conscientious worker and doing the best that he can for his community, for his city, the state, or the nation. Unfortunately, the opposite impression seems to be abroad in the minds of the public, and one hears frequent reference to inefficiency. For the benefit of the engineering profession generally, publicity ought to be used to counteract this attempt to discredit engineers.

No doubt, some attacks made on engineers and the somewhat derogatory remarks about them are, to some extent, justified. The fact is that the engineer in public employ, spending public funds, does not always appreciate the fact that it is his duty to his employers, the taxpayers he is working for, to get results. Moreover, if the man you have working for you, no matter how good he may be, does not report in language that you can understand, he is apt to be fired pretty soon.

A Counter-Fire of Publicity. Every man in the public employ, and every young engineer doing public work, should, as an early part of his education, learn to tell his employer and learn to tell the people who pay the bills, in simple, direct language they can easily understand, what he is doing. As a matter of policy he should avoid replying to attacks, because such replies magnify the attacks; but rather he should always keep burning a counter-fire on what he has done and is doing and proposes to do, to meet the attack that is bound to come, and will come, unless he does make frequent and clear statements.

Dr. F. H. Newell, former head of the United States Reclamation Service, said he was nearly always under investigation "for graft, corruption, and all sorts of deviltry, but I always had a man hired by the year to put the contrary story out, to continually present to the press, day after day, accurate statements of what had been done, and what we were doing, simply making constructive informational statements in a direct and positive form, and I believe the expense of doing that has been justified."

Every young engineer should learn the fallacy of the assertion taught in the classes that "your work speaks for itself." Most of our work cannot speak for itself. A sewer underground may be doing magnificent work, may be the result of a life's effort, and yet cannot speak for itself. The men who built it may be accused of grafting on the public, because the public doesn't know what the thing is.

Perhaps the best illustration that was ever given was by Theodore Roosevelt, when he dedicated the Roosevelt Dam. Many politicians were present and made glowing speeches about the wonderful climate, the great state, and the great country. After Roosevelt had listened, he made a few remarks of appreciation, then he turned to the little group of engineers who had been in the background, and he said, realizing the general lack of appreciation of those to whom credit belonged: "And as to you, you engineers who did this work, your reward will be an investigation."

Roosevelt's Plan. In checking adverse opinion, perhaps the best way is to take the aggressive. This was Roosevelt's plan; and Roosevelt was a past master at holding public opinion, primarily because he was sincere, enthusiastic, capable, and had the good of the nation at heart. If things were not going well with Roosevelt, he would get out and start something, and direct attention to some new project.

How Press Contributions Help the Young Engineer. Contributions to the technical press serve to obtain one type of valuable engineering publicity, and the value to the contributor is one of the reasons for publicity which the engineer, and especially the young engineer, will do well not to overlook.

Aside from his scholastic training and his practical experience in industry or in the field, nothing contributes more to the progress of a young engineer than to form the habit of making acceptable contributions to the local or to the technical press.

In the first place, it clarifies his ideas, leads him to think along logical, connected lines, enlarges his vocabulary, teaches him precision in the use of terms, and frequently forces him to fill in certain gaps in his knowledge or experience before he can give comprehensive treatment to a theme.

Furthermore, he learns to concentrate on subjects which have practical rather than academic value; for the technical journals have little to do with theory, except as it finds practical application

in engineering, chemistry, metallurgy, or industrial uses generally, including transportation and providing the means for it, such as highways, bridges, motor vehicles, railways, rolling stock, docks and harbors, ships, and mines.

In each subject of which he writes he tends, for the time being, to become a specialist, and while he may not be enough of a specialist to offer any startling contribution to the world's knowledge, he will, at any rate, be a better, more practical engineer in that particular line than he was before he prepared the article.

Such effort, if continuous, soon begins to show in the young engineer's regular work and will attract attention from his superiors, even though they may never read the articles themselves. One thing then will lead to another, and the young engineer will find himself the center of an ever-widening circle of influence and value.



Typical symbolic cartoon illustrating the position of the professional engineer in society.



Maximum Newspaper Space

THIS double spread represents perhaps the largest newspaper article on an engineering subject that has appeared under the auspices of an engineering society.



Members of the training class loading a 700-lb. projectile, 12-inch mortar.

AUXILIARY COAST DEFENSE

Long Beach (Calif.) Chapter of the American Association of Engineers, and the local Progressive Business Club form class at Fort MacArthur



Firing a 12-inch mortar at Fort MacArthur. 700-lb. projectile; range, 10,000 yards.

Public Information Bureau
American Association of Engineers
63 E. Adams St., Chicago

Civilian Coast Artillery

THIS series of pictures illustrates the general news appeal of non-technical activities of an engineering organization. The following is part of the news article accompanying each 8x10 glossy print sent to the general press.

"This class, composed entirely of civilians who are members of the Long Beach (California) Chapter of the American Association of Engineers and the Progressive Business Club of Long Beach are receiving voluntary training as coast artillerymen. The class assembles one evening each week for instruction under the direct supervision of Colonel Henry E. Hatch, commanding officer of Fort MacArthur. Civilians not only man the mortars but also are training in the observation stations and man the plotting room where the engineer fits well on the plotting board"

NEWS

THE erection of a building is news to engineers and real estate men—but with a lion on top it is news to the general public.



CHAPTER II

THE RIGHT CONCEPTION OF PUBLICITY

Molding Public Opinion. Before we go ahead to obtain the publicity which the preceding chapter has shown to be so valuable, it is best to get clearly in mind just what we mean by the term publicity, or public notice, or public information work.

All public notice of engineers and engineering, to serve the purposes outlined in the previous chapter, will be directed toward molding public opinion favorable to the engineer. It is the favorable opinion of the public which all forms of publicity seek.

Publicity, Press Agency, Propaganda, and Public Information Work. To see to it that the people are fully, intelligently, and honestly informed is undoubtedly the chief aim of enlightened publicity. Yet it is often a very difficult goal to attain and its attainment calls for wisdom and skill.

Publicity, press agency, and propaganda are terms often used interchangeably, but the three activities are very different.

Propaganda, of course, depends on publicity, but it carries also an implication of something being done in an underhanded way, something that insidiously plants wrong ideas in the mind and has an ulterior motive.

Publicity, on the contrary, is a light-of-day proposition. It must have in mind a public service and be sound ethically, both in its purpose and its operation, for its object is education.

The average man in this country is interested in what the other average man is doing. This is proved by the fact that if you want to obtain the good things of the world for yourself, the first thing you generally do is to find out what the rest of the people are doing and what they need, and try to supply that need. The idea of filling the need for information is the basis of all public information work; and when frankness, honesty, sincerity, and ability are combined in presenting the problems of any organization, whether it be educational, financial, political, or commercial, to the community and the country at large, the public will listen and be interested.

The Place of Public Information Work. Public information work is the larger view of publicity; it is an important factor in our life today. In commercial organizations in the past it has ordinarily been in the hands of the president, or some high official of the company; but as manufacturing, educational, and financial institutions have become more dependent in their growth and economic welfare on acquainting the public with what they are doing, systematized methods of handling public relations have developed.

This development has become necessary because of the greatly increased volume of such work, and the utilization of more routine methods

of reaching the public. The work is now delegated to some assistant; or, in large organizations, to a special department. Public information work is closely allied with business research, advertising, trade extension, and service work. It touches all of them in some manner, depending upon the relative importance of publicity in the life and welfare of the organization. As a matter of fact it includes all of them, the basic thought being to create and maintain good will, and to acquaint people at large with the salient points of the business in such a way that they will be interested, and will support it. Converting good will into money is more the field of advertising and selling. Public information work stands in an ambassadorial position, rather than a soliciting position. Many of the methods employed in this work have come down to us from the ancients; they are methods which were used by Aristotle and the Caesars.

Not very long ago a university in the Middle West felt that it needed the support of the whole state in order to increase its usefulness to the state. This university went about telling the state what it was doing, not in a boastful way, but truthfully presenting the problems that came to them, and the efforts they were making to solve these problems, pointing out the work that could be accomplished with more adequate support. Today this university is known from coast to coast for its progressive work and the close relations existing between the university and the people of the state; and the university is growing to be one of the

largest in the United States. Through the development of its relations to the public it became a factor in developing the environment in which the people of the state live. The university became an *entrepreneur* of public opinion through its ambassadors to the public.

Public Service Is the Basis of Public Notice. At the time when Richard H. Waldo was Chairman of the Publicity Committee of the Associated Advertising Clubs of the World, there took place, perhaps for the first time, an actual working out of a definite formula for publicity, which was this:

Policies, plus personnel, will result in full publicity; and any time that you want publicity, that is the way to get it.

Publicity is a root, though a lot of us think it is a fruit. It is not; it is rooted in policies, and if your policies are not right, then the tree will be a barren one. You will have no publicity. You may get some pieces in the newspapers, which many members of the public think are publicity, but you will not get the right kind of public notice of engineering if the public service, which is the basis of all proper public notice, is lacking.

Where there is public service, public notice may always be expected to follow. You have but to present your story in such a way that the man for whom it is intended will find it interesting.

One has to do practically what the town fool did at the time he claimed the reward for a lost horse. He got the reward, and they asked him, "How is it that you, the town fool, were able to

find the horse when no one else in the whole town could do so?"

He scratched his head and said, "Huh, that was easy. I thought what I would do if I was a horse."

That is what you have to do in publicity, you have got to have in mind your Mr. Smith or Mr. Jones, who reads the *Pittsburgh Dispatch*, or the *Los Angeles Times*. If he likes it and reads it everybody will, and that is the thing above all things that technically trained men must bear in mind.

The Engineer's Opportunity for Publicity. Engineers are identified with public service everywhere, not merely that percentage of the profession who are actually employed in what is commonly called "public service," but all who are engaged in the construction of sky-scrapers, in planning power, in terminal problems, or in keeping railroads properly maintained. All are in the public service; therefore, there is no group of men in the United States who have so magnificent an opportunity for publicity. From the earliest days of learning their profession to the time they become the elder statesmen of that profession, engineers are always working along the lines of bettering civilization and hastening its progress.

There are two broad phases of public relations work; first, to determine just what type of information is most effective in developing good-will; and second, the mechanics of distributing this information in the broadest possible way, so that it will reach the people who are most interested and

who will be of most value to the profession after their interest is obtained. This work is really the connecting link between advertising, as it exists now in most organizations, and selling, which has to do with the distribution of a product at a profit. It is a connecting link which has been highly developed by some organizations, and it is susceptible to a tremendous future development.

Information Must Be Valuable and Useful. The primary requisite of any information given out by an organization is that the information shall be of value in the every-day life of the people who receive it. This is the kind of information that sticks. Sensational information attracts attention; but it frequently has not the lasting qualities which are more desirable.

C. R. Thomas, Editor of *Professional Engineer* and formerly in charge of publication of results at the Forest Products Laboratory, said: "I sometimes think of the director of publicity as the leader of a big orchestra, the instruments of which are even more varied in their tone and type of appeal than those of the orchestra. In the orchestra sometimes we hear the blare of the trumpet, at other times the soft, sustained note of the violin, and again the rattle of the traps and the boom of the drums. In a campaign of publicity the harmonious use of a great many means of publicity is an essential feature. The timing of announcements and inaugurating policies must be carefully studied. For let it be remembered that discords can be produced, if the various agencies of information are not well coordinated."

Chicago Daily Tribune 'SUBWAY NOW' PLAN READY

The Head

WORK CAN BEGIN THIS SUMMER, ENGINEERS SAY

All Sections to Be Reached by Bore.

Engineers working under the direction of the city council's local transportation committee have completed tentative plans for a comprehensive rapid transit subway for Chicago.

The routes are to be submitted to the committee next week. As at present agreed upon, the routes in the main follow those recommended by the harbor and subway commission of 1911. At that time the plan was known as the "Harrison plan," backed by former Mayor Carter H. Harrison.

Attorneys for the committee may that by using the \$30,000,000 now in the traction fund, construction work on the tubes can be begun in the downtown district within this summer, if the council desires, and that the work can be extended by financing it through the plan of issuing utility certificates outlined by Ald. U. S. Schwartz.

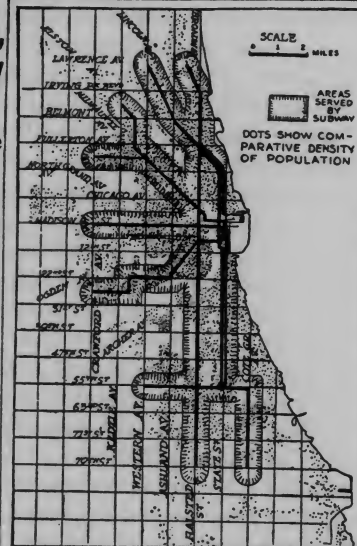
Engineers Approve Routes.

The route plan, which has the approval of Engineers Mon J. Arnold, R. P. Kehler Jr., J. H. Fryer, Charles E. Fox and Harold Almer, may be changed somewhat before it is presented to the aldermen, as representatives of several organizations are yet to be heard.

The subway would be municipally owned and operated, according to present plans. However, the engineers point out that if work is begun in the downtown district and the surface or elevated lines, facing competition, should ask to be included in the traction scheme, it would be possible to switch the plans to render unification of surface lines, elevated, and subways.

As planned by the engineers, there would be 111 single track miles of subway tracks and 56 miles of tubes. It is declared that 1,750,000 persons

PROPOSED SUBWAY SYSTEM



Engineers have completed a plan for a comprehensive subway system for the city which will be submitted to the council next week. The map indicates the proposed routes and the territory to be served.

The Tentative Routes.

The routes which have been given the tentative O. K. of the engineers are as follows:

North side to south side—Beginning at Lawrence avenue and Broadway, a two-track subway is Broadway to Irving Park boulevard and Halsted street; south in Halsted street to Fullerton avenue.

Beginning at Lawrence and Loomis streets—A two-track subway is Loomis

Five within half a mile of the proposed routes and that 1,671,500,000 passengers would be carried on the subway lines each year.

The air through route trains are recommended. There would be no "loop" in the downtown district. Trains would be operated from the west to the north and north side, via the loop, and from the north to the south side and vice versa, much as the present Evanston-Jackson park "L" trains are operated.

A well-presented, front page engineering news story.

James Bryce, the English statesman who has written the best survey of our government, says in his book, *The American Commonwealth*: "The United States is governed by public opinion." What we are discussing is public opinion and publicity in its broadest and not its narrowest sense. We ought not to confuse automobile and movie actor write-ups or press agency with the making of public opinion.

The Public's Debt to the Engineer. The engineer has been the conqueror of nature. He has made possible greater production by labor. He has raised the standard of living and has supplied the new human wants that have come with our advancing material civilization.

But if this were all, his contribution would be paralleled by the other acts and professions. The public debt to him is greater than these. To the engineer also must be credited a kind of thinking which goes deeper than the material things of life. The true engineer is guided not alone by an abstract material philosophy of getting the facts and raising material structures for the benefit of mankind, but by a sense of service second only to that of the preacher.

It is when we consider these things that the true significance of the tremendous importance of publicity for engineers and engineering becomes evident.

The true conception of engineering publicity, we have seen, is that of public information work, or public notice based on public service. Because

most publicity is ordinarily obtainable through news items in our daily and weekly papers, we ought to continue our definition of publicity to include a definition of news, and we should distinguish between the newspaper man's conception of news and his conception of publicity.

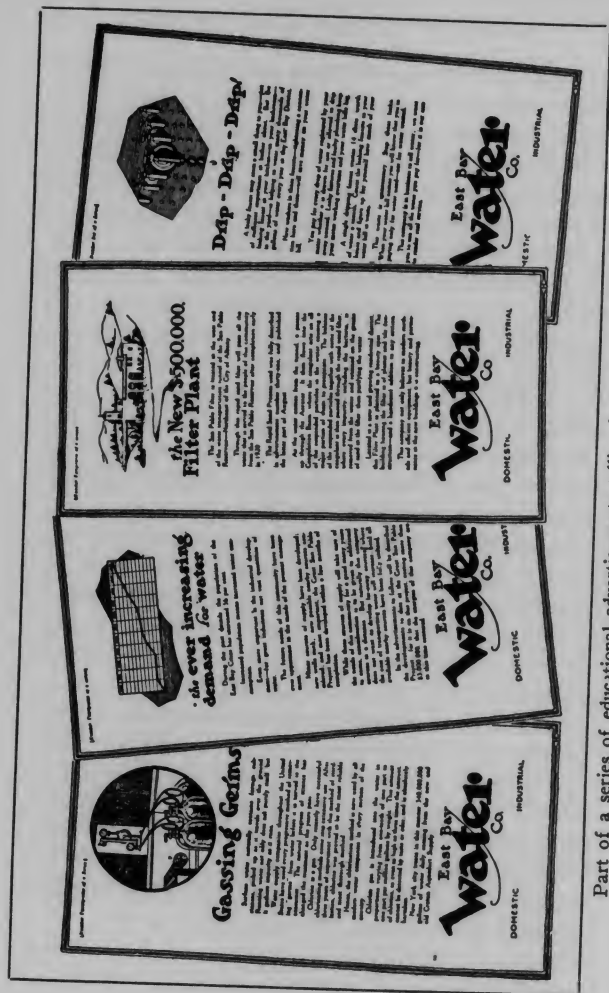
The Difference Between Publicity and News.

News has been defined as anything which interests people. It may be spread only by word of mouth, as in the case of local gossip, or the evening recounting of the day's happenings around the family table, or it may be spread throughout the civilized world by means of speakers, motion pictures, posters, advertisements, or organized press bureaus, in the case of events of sufficient human or international interest.

One way to consider news is that it is what appeals to the largest group of people. It is the instinct of the newspaper man to find that kind of news. To establish in the public mind the consciousness of engineering and its contributions to society is what we should undertake.

It is difficult to define, in a brief space, the difference between publicity and news. Here is what a newspaper man recently said: "I should say, broadly speaking, that news is anything that has to do with the welfare of the public, whereas publicity is something which serves some particular purpose of some private or semi-private character."*

* For a more complete discussion of what is news, see *Collier's Weekly* for March 18, 1911.



Part of a series of educational advertisements telling in popular way facts about water.

Pick Real News in Seeking Newspaper Publicity. Publicity, as such, often is not acceptable to newspapers, yet publicity and news intermingle to a considerable degree, and it is important in all publicity work attempted with newspapers to study the subject from the standpoint of greatest news value.

A chapter of the Association holds a meeting and wishes to get some mention in the local papers. To the chapter, whatever mention is made is in the nature of publicity.

But the newspaper editor's point of view is different. Suppose the account of the meeting which the chapter submits tells of the routine business, or consists of a technical discussion of some engineering subject. Then the local newspaper editor is likely to look on the notice of the meeting as "publicity," and if he has plenty of live news to fill his columns the notice will get into his waste basket.

If the account tells, however, that the chapter decided to recommend to the mayor a certain prominent engineer to be appointed city engineer, or that an expert talked on a proposed new water supply plan for the community, then the account of the meeting becomes news in the eyes of the editor and he is eager to print it because it has a general significance to the public.

An Example of News Value. Here is an example cited by H. V. Deuell, day city editor of the *Chicago Tribune*: "It was suggested that the Association has in mind asking the Governor to appoint a practical engineer and not a politician for

supervision of road construction. Certainly nothing can have greater public interest than that, and you are entitled to representation in the newspapers. While you talk about it to engineers to enlist the interest of your own members, you have publicity, but if you will actually go out and do something, if you go to the Governor and say, 'Mr. Governor, here is the name of this man who, we assert, is the most competent engineer in the state to supervise this road,' you have actually done something that is of news interest and it will figure in the newspapers.

"The same way with city planning and the same way with questions which have national application. I understand, for example, a movement is on foot to make a survey of the power possibilities of the Pacific coast. That is entitled not only to representation in local papers, but to representation in national papers."

Areas of Interest in Selecting News. Because Iowa is going to move more dirt in the construction of roads through that state in a year than the United States moved in the construction of the Panama Canal, it is absurd to expect that the two facts should command equal publicity. Newspapers are always dealing in news with areas of interest. For instance, what is of interest to Chicago is not of interest to New York. What is of interest to Springfield, Ohio, is not of interest to San Francisco. And so, when planning to get into the newspapers as a national organization, it is necessary to operate more or less locally.

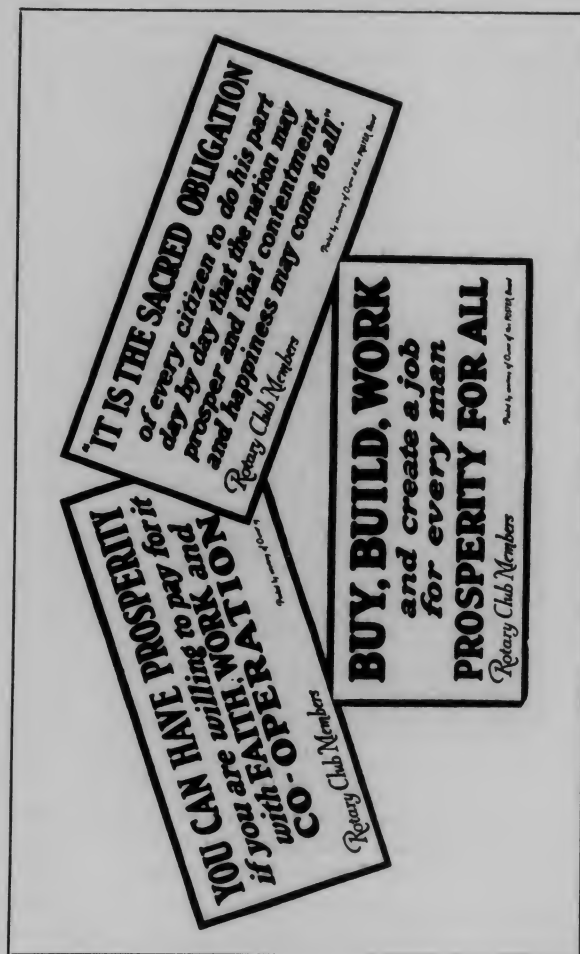
The Editor May Know More About His Job Than You Do. This interesting statement comes from the same newspaper man referred to above.



New York Tribune.

The cartoon is perhaps the most emphatic method of portraying facts.

"It is not true that the newspapers fill up space. That is a popular misconception. Every night there comes to us, I suppose, from 400 to 500 different items of news which have to be thrown on the floor. Neither is it a fact that we delight in the publication of scandal.



Three of a series of nine posters used by the Rotary Clubs in December, January and February, 1922.

BRIEF FACTS IN RELATION TO *Rotary Prosperity Poster Campaign*

To be designated, **ROTARY PROSPERITY POSTER CAMPAIGN**. 100,000 24-sheet poster-boards will be used, each carrying a 20 to 25 word message.

Nine slogans or messages will be shown.

The 100,000 poster-boards will be used during the months of December, January and February.

In December, every poster-board will carry a message from the President of the United States. This will be the only one used in this country during December.

A separate message will be used for posting in Canada in December.

In January and February four different messages will be shown each month.

On every poster-board during the ninety-day period, in the lower left-hand corner, the words "Rotary Club Members" appear. The campaign will be carried out, simultaneously in the United States and Canada.

8,000 cities, towns and villages will be covered. Statistics show that more than 50 million people will be reached.

225,000 posterettes, each 10"x20", carrying appropriate messages, suitable for window display purposes, will be sent out.

The cost of the poster space, posting, paper and ink, figured at regular rates, totals \$1,500,000.

The Poster Advertising Association, through its members, have patriotically donated the 100,000 boards.

The lithographers have donated the 225,000 posterettes.

Paper will be furnished at less than cost.

Lithographers will print the paper at less than cost.

Ink manufacturers will supply ink at less than cost. In some instances, ink has been donated outright.

280,000 pounds, or 140 tons of paper will be required.

5,000 pounds of ink will be needed.

Because of the patriotic and unselfish co-operation and donations of the Poster Advertising Association, paper manufacturers, lithographers and ink manufacturers, the \$1,500,000 cost is reduced to \$60,000.

The \$60,000 is required to cover cost price of paper, ink and printing; shipment of posters and posterettes to the 8,000 cities; clerical and stenographic expense, postage and incidentals.

The plan has the enthusiastic approval and endorsement of the Directors of the Rotary Club of New York, and the unanimous ratification of the members present at the monthly dinner meeting, held October 4th.

A group of individual Rotarians has underwritten the \$60,000.

The campaign will be carried on through an Executive Committee, Finance Committee and Board of Trustees (see list of Committees and diagram on reverse side of this sheet).

"No business has a moral or material right to survive that does not intelligently and honestly serve."

Yours for Peace, Progress and Prosperity.

EXECUTIVE COMMITTEE.

How the Rotary Prosperity Poster Campaign was handled.

"It is also a fact that anybody that comes to a newspaper office is never turned away by virtue of the fact that we dislike to publish anything of a non-sensational character. They are turned away, if they are turned away, because what they have to offer is not appropriate for publication. Suppose I should go to you who were going to build a bridge. I have a lead pencil and I say, 'Mr. So-and-so, here is a nice lead pencil. You put this in the middle of your bridge to support it and let it stay there, because I assure you that it is going to be of great value to yourself and to the safety of the structure.' You will look at me and probably have me ejected from the place. Yet I have had men come to me with manuscripts of great length and great erudition, unquestionably so, and say, 'Here, take this; put this in your newspaper. I assure you this will do your newspaper quite a lot of good.' It is an absurdity. We have to discriminate between what the public will read and what the public will not read, and that is a highly specialized business."

Public Service Human Relations

R. E. McDonnell

H. J. Hughes

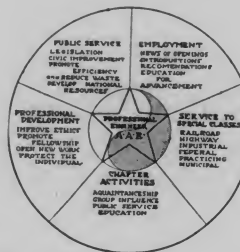
W. J. Towse

J. F. O'Berry

The Obligations of An Employer

FEBRUARY, 1922

Twenty Cents a Copy



AN Association publication and its relation to the membership served.

American Association of Engineers CODE OF ETHICS

ANY code of ethics must be predicated upon the basic principles of truth and honesty. Whatsoever things are true, whatsoever things are honest, are the things for which engineers must contend.

An engineer may not "go beyond and defraud his brother" by any underhanded act or method. He may not do or say anything which will injure his brother's reputation or his business for the purpose of securing his own advancement or profit. This admonition carries with it no obligation to refrain from telling known and absolute truth about an unworthy brother as a protection to others, but the truth so told must be such as can be substantiated, and he who tells it must have the courage which will not shrink from the consequence of his telling.

The engineer owes his client allegiance demanding his most conscientious service. But conscientious service to the client must never entail a surrender of personal convictions of truth and right.

An engineer who receives compensation from an employer may not receive gift, commission or remuneration

of any kind from a third party with whom he does business for that employer.

An engineer seeking to build up his business may not resort to self-laudation in advertising. He may state briefly the lines of work in which he has had experience, and enumerate responsible positions which he has held and give his references.

An engineer who employs others either in his own service or in that of the client who employs him, should recognize in his relationship to them an obligation of exemplary conduct, of helpfulness and personal interest in those with whom he is thus brought in contact, and he should discharge such obligation tactfully and kindly.

The honor of the profession should be dear to every engineer, and he should remember that his own character and conduct reflect honor, or the reverse upon the profession.

If, then, he so lives that his own honor shall never be smirched by his own act or omission, he will thus maintain the honor of the organization to which he belongs.

One of the foundation stones of the American Association
of Engineers.

CHAPTER III WAYS AND MEANS THAT BRING PUBLICITY

What the Public Wants. Everywhere we look we see the work of the engineer, yet how many people are conscious of that fact? It is true that engineering works do not always speak for themselves. Few people ever know about the finest sewer underground or the method of mining that reduces the cost of fuel. This is true of a good deal of work of the engineer—work which can be told about in an interesting and constructive way.

The public service on which all valuable publicity is founded is present everywhere in the work of the engineer; to get the widest kind of public mention, every engineer must be an interpreter of engineering to the public, and he must know how to be such an interpreter. As engineers we must be a force in public opinion.

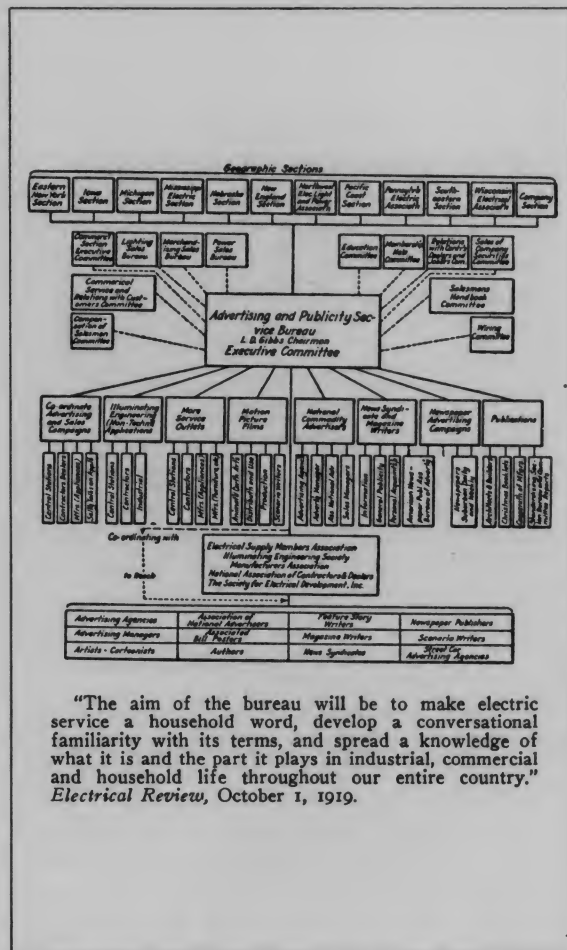
Perhaps it is necessary to put a little more emphasis on the subject of interpretation, both in colleges and in practice. The articles through which publicity is desired are frequently dry reading. Most people consider articles by engineers as highly technical essays that cannot be understood, and in which they could not be interested if they tried. They therefore do not give articles by engineers the attention that they should. The psychology is wrong to start with.

The style of writing need not be pure description. Pure description can no doubt be made very interesting, but one can easily change to narration, telling how an engineering project was actually accomplished, and gain a great deal in the telling.

Obtaining publicity, when we think of newspaper publicity, is a matter of selling the right kind of information to the editor; a matter of convincing him he ought to publish engineering news. It has always been true that, in trying to sell something, the first step is to try and find out what the public wants. What the public wants and what engineers have to give to them is one way to look at the publicity question.

Central Publicity Bureaus, National and Local. A nation-wide, sustained publicity campaign involves the collection, selection, and preparation of engineering information, and its distribution to interested people. Briefly the ordinary means of distribution inside the profession are the technical journals, society proceedings and bulletins, addresses, and discussions. Outside of the profession the greatest medium is the newspaper, but public speaking, school lectures, popular magazines, circulars, moving picture films and the more general participation in the deliberations of chambers of commerce, school boards, and other civic bodies are fertile fields which must be cultivated.

To do the job effectively with the newspapers, contact by the local engineer as publicity agent must be obtained with the local newspaper. To be of most value, and to have his contributions



"The aim of the bureau will be to make electric service a household word, develop a conversational familiarity with its terms, and spread a knowledge of what it is and the part it plays in industrial, commercial and household life throughout our entire country." *Electrical Review*, October 1, 1919.

Public information organization plan of the National Electric Light Association.

carry weight, this local publicity agent of the profession should be backed and appointed by a local engineering organization. In too many cases, however, unless prodded continually by a follow-up scheme from a national bureau the appointment of a local engineer will result only in a few desultory notices of meetings. The establishment of a national publicity bureau, with local, state, or city organizations in cooperation, would be a good start.

What One State Organization Is Doing. For many years public education concerning engineers and engineering has been sadly handicapped by the broadness of the term "engineering" in the public mind. It is extremely difficult to give a man the definite impression we wish, when the term covers in his mind locomotive engineers, brick layers, the boy that holds the rod, and the president of the Pennsylvania Railroad.

The first thing needed is a definite legal status and legal standard for professional engineers. A concerted effort to secure the passage of registration laws in those states not now having them would be a logical first step. Such laws are of great value in restricting practice to competent engineers, but from the publicity standpoint the legal standing and definition given the profession are invaluable. It will be found that an intensive local publicity campaign will aid greatly in getting these laws upon the statute books.

An organization based upon the foregoing principles has been instituted in Iowa and has shown

promise of success. The two main divisions are (1) the preparation of publicity material, and (2) getting it before the public. The distribution organization is planned entirely with reference to the local newspapers.

Some Suggestions from Iowa's Experience.

The following is from the report of the Committee on Publicity of the Iowa Engineering Society, for 1919:

"The best medium for educating the public as to the real value of engineers and their work lies in the newspapers, and especially those in the smaller cities and towns. Engineering works of extremely large type and nation-wide interest have in the last few years received a vast amount of publicity, but it is the work of the ordinary engineer concerning which the public must be informed, before the economic status of the engineering profession can be materially raised.

"If a description of engineering work is properly prepared and presented, newspaper space will be found waiting for it, for engineering work generally has news value. The most effective method of presentation is through personal contact with the newspaper editor. Material handed in personally by an acquaintance in whom the editor has confidence will be printed, where a circular letter would go in the waste basket.

"The engineer's daily work abounds in good news stories, things in which the people are interested, but which are never published because the engineer does not recognize their news value or

is too busy either to write them himself or to give them to someone else to write up.

"There are two methods of getting these stories into the papers. The engineer must either write the story himself or take the reporter or editor into his confidence and give him the facts. It has frequently happened that disappointment results with this latter method, due to the fact that the reporter's lack of engineering knowledge prevented him from bringing out the important points in the news story.

"Engineers must promote publicity for engineering and not for a particular engineer. Newspapers very generally refuse articles the publication of which as news would amount to free advertising for some individual or concern. The particular engineer's name should be mentioned simply as one item or part of the news story, but the underlying motive must be publicity for engineering and engineering work without reference to any particular engineer."

Developing Volunteer Service. We have agreed that engineers must have publicity in order that they may occupy a better position to help themselves and help the other man. The question is, how to get it? It is impossible, because too expensive, to hire many men for that definite purpose. The big thing is to develop the unknown men, the exceptional men who can do things. No one man can spend much volunteered time; yet in the aggregate that volunteered work is the most valuable thing. To get it, ways must be devised to

bring those men out, to give them simple instructions and advice as to how to get into touch with the local editor, and how to recognize and prepare the kind of information that will be taken by him so as to build up, especially in the small town papers, a better knowledge of what the engineer is doing.

In the cities the problem is perhaps easier, because a more elaborate organization is possible, but the greater strength comes from a widely diffused body of men who can bring that material to the attention of the thinking people, to the attention of constructive civic organizations, and to all those people throughout the length and breadth of the land, who can be reached through these agencies.

It is necessary to give a few simple directions to these volunteer committees as to how they shall go to work, how they shall pick out of the membership the men who may be able to write, who may be able to get into personal touch with the editors and writers.

Many Agencies Are Available. The newspapers constitute the easiest way of reaching the public, but there is no limit to the number of agencies that you can employ. The railroads, for example, have utilized the clergymen of the United States to good advantage. They simply gave them facts from the payrolls of the railroads, facts which cannot be disputed, since they come from the Interstate Commerce Commission reports. At one time the railroads were pretty well disliked, but at the

PUBLIC INFORMATION MEDIUMS

A.—Advertising

1. Newspaper card.
2. Newspaper display in campaign.
3. Magazine.
4. Special announcements.

B.—Direct-by-Mail

1. Circulars.
2. Books.
3. Chapter bulletin.
4. Special campaign of information and visual reminders.

C.—Newspapers and Magazines

1. News items relating to specific happenings or accomplishments.
2. Photographs with short descriptive captions.
3. Editorials.
4. Cartoons of any kind.
5. Interviews with prominent people.
6. Sunday feature articles.
7. Special column comments:
(a) humorous, (b) sporting, (c) women, (d) society.
8. Letters to the editor and answers.
9. Feature stories for magazines.
10. Technical articles for trade magazines.
11. House organ articles and comment.
12. News syndicate stories.
13. Picture syndicate photographs.
14. Contest: Limericks, jungles, definitions, letters, songs, photographs, posters, essays.
15. Slogan campaigns such as "Build Now."

D.—The Spoken Word

1. Addresses by prominent men which are reported.
2. Proclamations by prominent men afterwards printed.
3. Short talks at meetings of various kinds at the theater, in public schools, and at luncheons or dinners.
4. Announcements at public gatherings such as auctions and athletic events.
5. Pulpit notices and sermons.
6. Committee membership in scientific and economic organizations.
7. Solicitations of salesmen and organizers.

PUBLIC INFORMATION MEDIUMS—Continued

E.—Demonstrations

1. Mass meetings of people interested.
2. Receptions to special groups.
3. Group demonstrations by lodges, clubs, military organizations, etc.
4. Elaborate exhibits at conventions.
5. Parades on city streets and at fairs.
6. Stunts, such as sandwich men, band wagons, etc.
7. House to house solicitations with samples.
8. Special days such as "Fire Prevention."

F.—Visual Reminders

1. Posters, and cards as (a) billboards, (b) windows, (c) bulletin boards, (d) automobiles and trucks, (e) hotels, (f) railroad stations, (g) street cars.
2. Banners and streamers on streets.
3. Electric signs.
4. Tags, stickers and rubber stamps for use on letters, packages, pay envelopes.
5. Handbills.
6. Inserts for use in packages of all kinds, books from libraries, mail, newspapers, and pay envelopes.
7. Displays in merchants' stores, windows, and on sidewalks.
8. Exhibits in public schools, and posters and other work by school children.
9. Advertisements on theatre programs and score cards.
10. Slides and short news films for use in motion picture theatres.
11. General interest motion pictures for use in schools and theatres.
12. Technical motion pictures for conventions and selling ideas.
13. Stereopticons and automatic lanterns in lobbies, store windows, public buildings and at night on vacant walls.
14. Cards of invitation, advance announcements and programs.

The Test of Public Information:
"Do People Talk About It?"

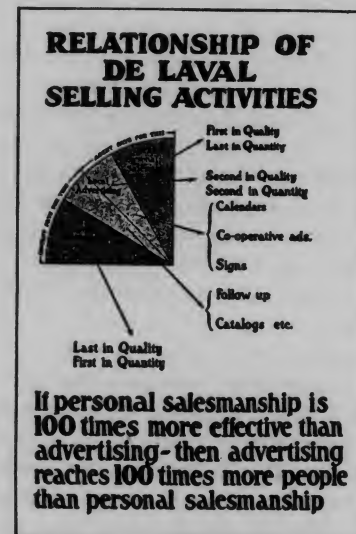
end of the campaign just preceding the passage of the Adamson Law, a great compliment was paid to the wisdom of the policy adopted by the railroads, when the chairman of one of the big railroad brotherhoods said that "the railroads have bought up eighty-five per cent of the newspapers of the United States." The railroads had merely given the facts to the public through the pulpit and newspaper, and the effect of this publicity was inevitable.

Do Something—Then Tell About It. A newspaper will print anything that interests the public. The easiest way for an engineer to get publicity is to do something unusual. When half a dozen of the biggest engineers of the United States went to Philadelphia and, simply by their professional engineering ability, were able to break up the biggest and most powerful political organization that Philadelphia ever had, they got publicity because they did something.

When engineers do anything that is worth while for the public the newspapers are only too glad to print it. They are always looking for good material. If part of a town were low and flooded and the engineer devised a scheme to keep the basements dry, he would get publicity for that, because it interests the people.

The point to emphasize is this: Whenever engineers do something for the public the newspapers will be only too glad to print it. The reason engineers don't do more for the public is because the public does not realize at all, or very slightly,

how much can be done by them. Moreover, the engineer, to the average man, may be a fellow who carries a transit, or one who holds the throttle on a locomotive.



A chart used to show graphically the relative effectiveness of personal appeal and the printed word.

Methods in Use. Methods of disseminating information resemble closely those used in sales work. Two broad, general methods are available: (1) personal appeal; and (2) advertising and publicity. The former is direct and restricted in scope; the latter is indirect and broad. The general purpose of both is the same: to get available informa-

tion in actual economic use. Circumstances and the type of information to be distributed largely determine the emphasis that must be given to each method in each specific case. In an organization such as the Red Cross or a large university, data are best disseminated through personal work and the organization of branches, although much direct-by-mail work is used profitably.

In marketing a product a manufacturer considers: (1) the kind of market desired, its limitations, who uses the product, and how much will be used; (2) what selling methods shall be used; (3) shall the product be sold direct to the user, or through a distributing agent. These same factors must be considered in planning a campaign to obtain the widest possible use of information. It must also be remembered that marketing is largely dependent upon the variable human element.

Mapping Out a Campaign. The general problem of mapping out a campaign of publicity for a specific purpose must include a study of when, how, how much, and how long. Various mediums and avenues of publicity are given in the accompanying list on page 42. Some of these means of publicity will not be available in the early stages of the campaign and, except in unusual cases, it will not generally be desirable to use all of them at one time. The cost of such publicity work is small as compared with its effectiveness; and its effectiveness is proved by its widespread use. It is readily seen that it is based largely on ability and ideas, rather than paid space in advertising mediums. It

would require more space than is available to discuss the details of how each of these avenues of publicity is used; and the discussion would be of uncertain value. The same set of conditions is never presented twice; and the same methods will not serve many times in succession.

The study of a field as a preliminary to a publicity campaign is primarily a matter of business research. It combines the study of production, selling, advertising, news gathering, promotional work, the possible results that can be accomplished in creating a vogue or good-will along certain lines, the best methods of accomplishing this work, the approximate cost, and the returns to be expected. Such business research should always be done preliminary to an advertising campaign; and a general publicity campaign can frequently be carried on as a feeler to determine just what type of advertising to use. There are two other important functions of a general publicity campaign: (1) to reach the class of people that does not read advertisements; and (2) to make advertising pull by an indirect appeal—a flank attack.

It must be remembered that the backbone of all successful public information work is well-handled advertising space in magazines and newspapers that go to people most interested in the organization. Advertising space is not dependent on news value or other uncertain conditions of public fancy or contingencies of business; and even though the advertising is not noticed until it is missed—it must be poor advertising indeed for this to be true—it is accomplishing a purpose.

The Personal Appeal. Undoubtedly the strongest appeal that can possibly be made for an organization of any kind is the direct personal appeal. This is the appeal of the solicitor, the orator, the theatre, the man who is a member of an important trade committee, and the head of an organization when he appears before the public or his employees on any occasion. There is also a definite psychology of merely having a man on the ground to shake hands. People like to see the personal representative of an organization; and this representative is most effective when he does not confine himself strictly to business, but shows that he is a human being and has other interests than those by which he earns his daily bread.

The appeal to the eye is the most effective way to attract attention because the least effort is involved on the part of the man to whom the appeal is made. Arthur Brisbane, who is a wizard at using words, says "one picture is worth a million words." There are so many well-developed methods of appealing to the eye that one is frequently at a loss to know just which ones to use. Study the characteristics of all of them, and use all of them as the proper conditions are presented.

The fundamental principle in preparing matter for printing is to "remember whom you are talking to." If you forget that, what you write will probably have little effect on the man you are writing for; and besides, it may not be published where it will do the most good. Editors study what people want; public relations men study what edi-

tors want. Both are engaged in disseminating information; but the work of the public relations man is always for the good of the organization he represents.

When to Begin. The proper time to begin a

ALVORD, BURDICK & HOWSON
(SUCCESSORS TO ALVORD & BURDICK)
ENGINEERS

WE BEG TO ANNOUNCE THAT THE FIRM ALVORD & BURDICK WILL
HEREAFTER BE KNOWN AS ALVORD, BURDICK & HOWSON
MR LOUIS R HOWSON, WHOSE NAME IS NOW IDENTIFIED WITH
THE FIRM, HAS BEEN A MEMBER OF OUR ORGANIZATION FOR THE
PAST FIFTEEN YEARS, AS ASSISTANT, PRINCIPAL ASSISTANT AND PARTNER.
AS IN THE PAST THIS FIRM WILL CONTINUE IN THE PRACTICE OF
ENGINEERING PARTICULARLY RELATED TO THE PROBLEMS OF

WATER WORKS	FLOOD RELIEF
WATER PURIFICATION	DRAINAGE
SEWERAGE	POWER GENERATION
SEWAGE DISPOSAL	APPRAISALS

INCLUDING PRELIMINARY REPORTS UPON SUCH PROPERTIES AND PLANS
FOR CONSTRUCTION.

850 DEARBORN ST
CHICAGO, ILL
FEBRUARY 10 1922

JOHN W. ALVORD
CHAS B. BURDICK

A typical announcement of a firm of engineers.

publicity campaign is the moment it is believed adequate returns can be obtained. This may be a time when business is good and the organization feels that it is wise to prepare for the time when it will have to fight for recognition; or it may be in the midst of a campaign to accomplish some definite result at an early date. Suffice it to say that a campaign should be so timed as to coordinate with the general trend of public opinion. An economy campaign, for example, would be some-

what out of place at a time when everyone is thinking but little of economy, although economy campaigns are never entirely out of place. It should be remembered that publicity is cumulative in its results, and once started it is difficult to control beyond a certain point.

Publicity for Ideas, Rather than for Men. Avoid publicity for men in an organization, if possible, although if they are men of note and they have accomplished work of local or national importance, names and personal anecdotes may be used because of their news value. But the ideas should carry the men, rather than the men carry the ideas. Any movement that is based on the personal prowess of certain men is doomed to failure. The paradox exists; but people are so constituted that once a man gets in a high place there are many who seek to pull him down, and eventually he falls. No man ever stayed popular over a great period of time, although no constructive movement ever failed over a great period of time. Ideas are greater than men; this should never be forgotten in public relations work.

The best methods of beginning publicity work are determined by the specific set of conditions presented. Every organization has certain friends who are interested in its work, and it is well to begin with these. All publicity work is a matter of ideas and ability rather than paid advertising space; although advertising space is the backbone of any well-conducted publicity campaign. It is not a bad idea to tie up the general work of pub-



Revolving Emblem in Parade of Engineers Dedicating Building

- WHAT:** A parade depicting the progress of engineering in the last century
- WHEN:** was held on November 19
- WHERE:** at Kansas State College, Manhattan, Kansas,
- WHY:** to dedicate a new \$125,000 engineering hall.
- WHO:** The ceremony was in charge of the engineering division of the college and the student chapter of the American Association of Engineers participated
- HOW:** by entering the float illustrated. An 8-foot disk was mounted on a pivot so that it revolved as the truck moved. It was lighted by flood lamps designed and constructed by Harry Nelson, E. F. Stalcup, J. A. Kibler, and L. W. Newcomer.

There were 25 floats in the parade representing all phases of engineering. Another interesting float

"Summarizing in the first paragraph is a safe rule" for news items.



This picture lacks general interest because it is without human figures.



This picture has general interest because human figures tell the story.



THE unusual picture always has general interest. Added value is given this picture because it portrays an important news event in Washington, D. C.

licity to some current, constructive public movement that will benefit a great many people. No reputable organization will attempt to obtain broad publicity except in connection with some constructive public movement.

The final measure of effectiveness is whether the object for which the work was undertaken is accomplished. The indirect benefits are of such nature that frequently final results cannot be accurately judged until a period of years has elapsed. It must be remembered that negative results can also be accomplished; and unless publicity work is founded upon the service ideas of improving the welfare of the people, negative results may always be expected. The difference in intent often results in the small difference that frequently distinguishes success from failure. Abraham Lincoln claimed that you could fool some of the people for a while, but you cannot fool all the people all the time. This is a true saying as applied to crowd psychology and holding public opinion.

Publicity from Government Bureaus. One effective source of engineering publicity which local organizations can cultivate includes the city, county, state, and national engineering bureaus. There is often in these offices an antagonism to newspaper talk and to publicity, but with the right kind of diplomacy the bureau officials can usually be made to see the value of good publicity to them and to their work. The following example may help to show how such publicity is valuable.

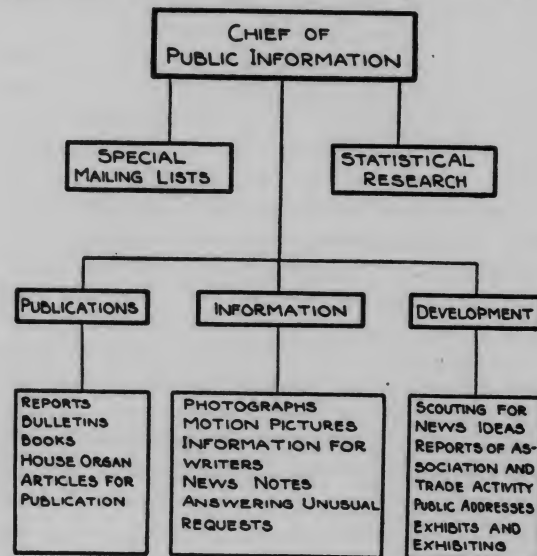
The Reclamation Service was possibly the first Government bureau that went deliberately into the distribution of information about its work, because Dr. Newell, the former director, felt its life depended upon the taxpayers knowing what was being done. At that time it was the unwritten law that no news should ever be given out from a Government office. It was necessary to wait for the annual publication, which was sometimes four months late going through the public printer's office.

So, in defiance of all regulations and precedents and rules, this bureau started out with the theory that no newspaper man should ever leave the office without getting some information.

The plan was started by having on a certain bulletin board a set of flimsies every morning. A dozen or twenty flimsies were put there, stating in a hundred words anything that would show progress. The newspaper men got into the habit of coming and reading them, and if they were greatly interested they would write out a story on the basis of that little outline. Some made of them a long story for the Sunday magazines, while others would put those items on the wire as press dispatches.

The success of many movements—take the forestry movement for example—has been due to simply showering the country with little, short statements of what was being done, until the people were educated to the fact that there was such a thing as forestry.

A Clip Sheet for Editors. It is important to get publicity in the local, small-town newspaper. The Chemical Round Table illustrated on page 56 is a good example of a press bulletin, put out in the



Functional organization plan for a unit of the United States Government.

right form, printed on one side of the paper, with proper leads to the paragraphs, headlines, and news matter. All the editor needs to do is to take his scissors and cut out what he wants to fill any space he may have available at that time.

At intervals many engineering items are sent out in this bulletin with considerable success. But

newspapers are flooded with similar press bulletins. They get them from manufacturing concerns and from everywhere. Sometimes editors will look through all they receive, but more often they look only at the ones that happen to be on their desks when they want to fill some space.

By sending a bulletin, perhaps several items but preferably on a single item, to an engineer or some other friend in a town, and asking him to take it up with the editor personally, the editor will always give more consideration to the item. With that kind of work, personal contact with the editor who selects news items, there is a good deal of advantage. The press bulletin is a fine thing, but it always succeeds better if it is sent to a local engineer to be handed to the editor. If, however, this representative takes a whole string of items and hands them in, they are likely to meet the same fate as if they were mailed.

What a Central Publicity Organization Can Do.

A central clearing house, well established, can collect, select, prepare, and disseminate material each week to all of these men, for immediate newspaper use. The material might consist at first of popularized stories of local application taken from the technical journals and society publications. A story on the general interstate water resource problem might interest several Western states, whereas an account or editorial opinion on a bridge failure in Ohio might not be of such widespread interest. Nevertheless, Detroit papers where a similar bridge is proposed might welcome such

information. There should also be collected and kept available literature on how other cities or states have handled engineering publicity campaigns, for such things as licensing, roads, water purification, and other public improvements.

With several general articles prepared and on hand each week, it should be a comparatively easy matter for the local agent to select one which would be of local benefit. Eventually a mutual understanding with the editor should lead the latter to rely upon the engineer's judgment in selecting suitable engineering material for his pages.

In some states the state society publicity committee might act as a relay station between the central clearing house and the individuals, sending the syndicated material, when of sufficient state interest, to a large number of its members.

A manual on engineering publicity should be available, telling the local publicity committee how its work can be done, what is news, how to deal with the local editor, how to write a lead paragraph. Topical outlines could well be included.

This was requested by J. W. Weer-
man, a member of the club, who said
the club in its bond issue report had
approved an appropriation of \$1,150,
\$250 for bridge approach construction
principally because it did not think
adequate approach extensions could
be made for that sum and because
the regulations for the use of the

SAVED MONEY ENGINEERS' LEAVE

ELLS COUNTY NEEDS

DEPARTMENT TO BE SHORT

NOTED ENGINEER
APPEALS TO
MEN HERE

While it was true that Dr. F. H. Hall, the national president of the American Association of Engineers, was unable to reach Miami when for the Big Officers' week in the Miami Y. M. C. A. hall.

Dr. F. H. Newell, president of the American Association of Engineers, speaking to the engineers of San Bernardino and Riverside counties.

"So many of you can't write in non-technical fashion. As soon as the ordinary engineer sits down to address himself to any topic that may be of popular interest, he becomes lost in a maze of technicalities. The engineer wants to draw a shadowgraph, giving all of the points and labeling them. He wants to look through the appearance

of the bridge, which is all the public is interested in, and tell how many tons of steel comprise it, what the strength of it is, and its factor of safety, and the public has no desire to familiarize itself with such details."

We All Speak Two Languages. Perhaps the greatest difficulty is that most men don't realize they speak two languages, their professional language and ordinary everyday language. They should be able readily to translate their professional terms into the language of the people. Take some fairly complex piece of machinery and describe it as you would to a jury. That is a true test whether you can write clearly and simply, in a way that will be understandable to all. A lawyer once said that he never knew what a simple matter the theory of bridge stresses was until he heard an engineer explain it to a jury in a bridge damage suit case. That is a high tribute to that engineer.

There is no single agency at the present time which offers such possibilities in publicity as the daily newspapers. The immense circulation of the larger dailies and the universal use of this form of reading matter by citizens of all classes make the newspaper a medium of unsurpassed value in placing information before the public.

Two Kinds of Newspaper Articles. Engineering publicity in newspapers is usually confined to news stories or feature articles. The former recount the current events in the engineering world, and the latter concern some special feature prepared in a more formal style for presentation in the feature

or magazine section of the Sunday paper or a special page of the daily issue. The latter type of article is more difficult to prepare and have published because of the greater necessity for having such a feature section contain material which appeals to the greatest possible number of readers. The possibilities of this kind of publicity, however, are great.

Learning to Recognize News Value. In any efforts to obtain publicity through the publication of news, the publicity man must search for those news values of the events of the profession and the Association which will appeal to the greatest number of readers. We must, if we are to deal in human relations, take cognizance of public opinion and be sensitive to popular interest. If the Association is to serve the public well it must keep the public acquainted with its activities in behalf of the public. To acquaint the public the Association must rely largely upon news. The special features of the Association's activities which will appeal to the newspaper's readers must be sought for and displayed as a means of acquainting the people with the efforts that are being made, even though these features may not be the most important from the Association standpoint. In addition to this we must continually bend our efforts to educate newspaper editors to a better appreciation of engineering news.

How to Select News. The elements of news value may be classified as follows:

1. The unusual, the extraordinary and the cu-

The
First
Day

LEGISLATURE HAS SLEEPING SICKNESS, *July 25* SAYS DR. EVANS

Engineers Should Have Been
Licensed Long Ago—Are
Preparing Bill Now.

That the doctors of the state will help the engineers to get a bill through the legislature requiring the licensing of engineers, just as physicians are licensed, is indicated by the promise of several prominent doctors to speak at the meeting of the local chapter of the American Association of Engineers Monday evening.

Dr. Harlon Evans, in commenting yesterday upon the address he expects to deliver, characterized the legislature as suffering from sleeping sickness. "Engineers should have been licensed long ago as a protection to the public," he said. Dr. Evans has pledged his support to the movement being instituted by the engineers.

Drs. Horace Linden and F. R. Hasley will also speak at the meeting, which is to be held in the chapter rooms in the Elks' building.

City Engineer H. R. Ladd will speak

ENGINEERS WILL DISCUSS LICENSING TONIGHT

July 26
The proposal that engineers be licensed by the state in the same way that doctors are licensed will be discussed tonight at the regular meeting of the [redacted] chapter of the American Association of Engineers at the Elks' club.

The engineers say that the public has no way at present of telling whether an engineer is really competent or not to perform the duties for which he is engaged. A state license law is expected to eliminate quack engineers as quack doctors have been eliminated.

H. R. Ladd, city engineer, will speak to the engineers on "The Engineer as a Public Official."

According to an announcement of Sec-

The
Second
Day

Following up news. (a)

ENGINEERS TO FORM A STATE ORGANIZATION

Eight Chapters to Join in Pass-
ing State License Law.

CITY ENGINEER DECLARES ENGINEERS BEST *July 27* OFFICIALS.

A decision to form a state assembly to include all chapters and clubs of the American Association of Engineers in the state was made at a meeting last night of the local chapter of that body. There are eight chapters and clubs of the association in the state and assurances have been received that they will join with the [redacted] chapter in forming the state organization. This will be the first society of engineers in the state. The total membership will be over 1,000.

"There is no reason why engineers should not fill eight positions in the city administration out of ten," declared City Engineer H. R. Ladd, in speaking on "The Engineer as a Public Official."

That engineers make the best timber for public commissioners and similar offices was another assertion Mr. Ladd made. He also maintained that the public has lost thousands of dollars in money wasted by politicians.

"Dry goods merchants and ward heelers have had their day as public officials in charge of engineering works," said Mr. Ladd. "From now on we can expect the public to be discerning enough to select men for positions requiring engineering training of the man in office. Street commissioners, county commissioners, members of boards of public works—such positions as these can be adequately filled only by engineers."

"These boards and commissions need not be filled with engineers, but there should be a large enough number to insure that the public funds appropriated for engineering works are conserved."

"There are few functions of civiliza-

The
Story

Following up news. (b)

rious. Something which upsets the humdrum routine of life.

2. Struggles of supremacy, such as business competition, contest in sports, political rivalry, strikes, and in general any struggle for victory.

3. Human interest or emphasis on the personal element of the affairs of life.

4. Politics.

5. The home and business.

6. The appeal of the helpless, such as children and animals.

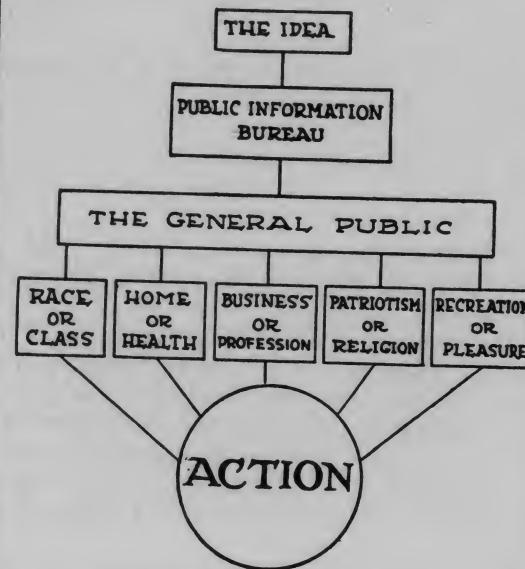
7. Amusements, sports and pastimes, such as photographing, fishing, hunting, chess, and many avocations.

The essential of all news is that it must be timely. There is a great tendency on the part of those not thoroughly acquainted with news gathering to disregard timeliness—the essential feature. There is no such thing in the journalist's lexicon as "up-to-date"; the expression he uses is "up-to-the-minute." News must be served while hot in order to be most appealing.

Write So John Smith Can Understand. The man writing engineering items for the public to read in the newspapers may well keep in mind the following incident which occurred between two magazine contributors:

One asked the other, "Why is it I can get my articles printed in such and such a magazine, but I can't break into the *Saturday Evening Post* to save my life?" The other writer said, "I will tell you why. You write for the highbrows, and I write for the general public."

Varied Types of Appeal are Needed



THIS chart shows how the appeal of an idea may be directed to the part of the general public which is most interested in each particular element. The type of appeal is different for different units of the public, for there are many "publics" and each part of the "general public" has its own peculiarities and must be appealed to accordingly.

It may be difficult for some technical men to write in John Smith's style. One newspaper editor gives this instruction to each new reporter: "We have an old fellow named Herman Miller, living up on Lost Creek. He has not much of an education, but he reads the *Dispatch*. I want you to write every article so old Herman Miller can understand it. If he can understand it everybody else can." That is the way to write engineering articles.

The interest of newspaper readers in events closely related to their own lives may be turned to good account by local publicity committees. When the methods of presenting news are thoroughly understood, there will seldom be any action taken by a chapter which cannot be made the basis of one or more news stories.

The local engineering events must be interpreted in stories which will interest the public. We must not think that we can mould journalism until it accepts news presented from a purely engineering standpoint. It will do no good to resent the journalistic custom which prompts a reporter to overlook what the engineer thinks is the meat of the subject and display some matter of trivial engineering importance. Instead, it is necessary to seek the elements of each piece of news which have the greatest appeal to the public and feature them as news pegs which will carry the more important engineering features.

Picking the Points of News Value. This will illustrate. Suppose a chapter has listened to an



How a local society dinner was made interesting.



A NEWS picture showing the official opening of inter-city commercial radio communication in New York City by Mayor Hylan and others. Mayor Hylan is shown in the center of the picture with Dr. Lee DeForest on his left. The tall man at the right of the picture is E. W. Sawyer, Member A. A. E., who is interested in the wireless company.



Engineers dedicate a new bridge in Charleston, W. Va.



This is the bridge that was dedicated as a civic institution.



A window exhibit during Engineers' Week in Missoula, Montana.



A state fair exhibit made by the Yakima (Washington) Chapter.



A well-planned float used in a civic demonstration.

address by an eminent sanitary engineer on the construction plans for a proposed filtration plant. If his address has discussed the construction of the plant in detail and he has actually said very little of the other features of the project, the public will not be particularly interested in an account of his speech. But suppose that in the course of his talk he has made a statement to the effect that through the reduction in the number of cases of typhoid one hundred lives in the city would be saved every year. There is a feature of his talk which the public can take to heart. If a newspaper reporter were present to cover the speech he would no doubt seize upon this statement as the feature of the evening. So in sending a report of the speech to the paper, the publicity man should feature this important part of the speech and hang on it the other facts which will indicate to the public the importance of the engineer's work.

In reporting engineering occurrences of all kinds a publicity man must seek the features which interest the public. It may be difficult to find them. It takes an unusually keen nose for news to be infallible in selecting the pertinent feature of every item. In order to make this selection as successful as possible the publicity man must know what are the particular news features in which the public is interested.

Sometimes there is a little twist that you can give to an otherwise lifeless and unattractive story that will make it eagerly accepted. A story once went out concerning the alcohol industry, and be-

cause it was called "Drinking the Legs Off of the Kitchen Table," the story was widely used. It was based on a little thing by Mark Twain. He said, "As long as a man can saw off the legs of the kitchen table and extract alcohol from them, we shall never have prohibition in this country." That story got over on account of the twist that it was given.

You can take an idea and put a twist in it in that way, and you will get the attention of a big audience; not merely an engineering audience, but a much larger audience.

"Turning the News." Then there is another point, the idea of turning the news. The question of licensing engineers is a more or less abstract subject, remote from people's lives. They admit it is a good thing, but it is hard to create enthusiasm on the subject. So in order to command much attention, it will be more or less necessary to wait for the psychological moment.

But let me assume that some horrible disaster occurs; that a movie theatre should fall down, burying many people underneath it. You would ascertain whether that particular structure was constructed by a licensed engineer; if not, then applying the old rule of doing something, you would immediately go to the state or the city building inspector, who has charge of that work and say, "We now demand that you put an ordinance on the books saying that only licensed engineers may put up moving picture theatres." You would then have dealt with a practical question

affecting the newspaper's intercourse with the public, the item of turning the news.

Remember, the newspapers only say "yesterday," or "to-day," showing the public that it is something fresh that demands attention now. When the movie theatre falls down and you go right away and say, "Now, because this occupies the popular mind, we want this reform effected," you have gotten the center of the stage; it becomes a matter of immediate and pressing importance to the public, and you have satisfied the requirements of the newspapers.

How Material Gets into a Newspaper. This brief explanation of the way material gets into newspapers, given by a city editor, will help you see how news items are selected:

"When you come into a newspaper office to see the city editor, he is, I assure you, glad to receive you, because he is in the position of a merchant who is receiving salesmen from various establishments handling various lines which he has to purchase. These products are items of news which he can sell in turn to the public. So he is never too busy, although he might seem so, to be interested in what you have to say.

"The city editor employs trained men who represent him—trained reporters. Now, a reporter is a person who has, in the same sense as a city editor, to use judgment as to news. News judgment, is an instinctive comprehension of what the public will read and what they will not read. You may apply this test to your own affairs, and you can

April 16

American Engineering Council
of the
Federated American Engineering Societies
Office of the Publicity Director
Room 101, 29 West 39 Street, New York City

NEWS SCHEDULES FOR EDITORS

Editors: Events listed on Schedule "A" are for the information of editors, who, in such case, should communicate with the secretary of the local society for cooperation in covering. The machinery of the Council's national headquarters, 719 Fifteenth Street, N. W., Washington, D. C., is available whenever practicable. Stories listed on Schedule "B" are prepared for publication in complete form and will be supplied promptly upon request made to James T. Grady, Publicity Director, Room 101, 29 West 39 Street, New York City, Telephone, Longacre 7100, Extension 53.

L. W. Wallace
Executive Secretary

- | | |
|-------------|---|
| April 21 | Rochester Engineering Society (Secretary,
Gloster P. Havenor, 52 City Hall) Radio
meeting |
| April 22 | Engineering Society of Buffalo (Secretary,
W. L. Hussbaumer, 80 W. Genesee Street, Buffalo. Inspection of
the power station, known as the River Station,
on the Niagara River. |
| April 26-28 | Society of Industrial Engineers (Busi-
ness Manager, George C. Dent, 327 South La |

SCHEDULE "B"

1. P.A. E.S. to aid Secretary Hower in gathering data on progress made by industry in smoothing out business cycle. Cooperation of all Member Societies asked in nationwide inquiry.
2. P.A.E.S. Employment Service reports improved conditions. Radio development a factor. (About 600 words-Ready.)
3. Boston Society of Civil Engineers elects officers. (About 150 words-Ready.)
4. Complete running story of convention of Society of Industrial Engineers, Detroit, April 26-28. (About 1,500 word

How editors are aided by an engineering organization.

arrive at an approximation as to whether or not the public will be interested in what you have to say.

"A man's interest centers in himself. He is interested in anything which concerns himself. Then it radiates from himself to his family, to his job, his means of transportation, to politics, to everything that comes into his life. All you have to do, whenever you have a matter which you think is of interest to the papers, is to say to yourself, 'suppose I were John Jones on the street corner. I am not an engineer, but an ordinary citizen. Is this matter which I have in mind of interest to me, John Jones?'"

"Suppose you were going to talk about employing a state engineer. There are hundreds of thousands of automobiles in the state. We are all, as automobile owners, interested in good roads. There you have an argument to present to any newspaper editor for publishing material about a state engineer."

It is a fact that if the man on the street is interested in what you are doing, you may enter a newspaper office and be assured of getting your idea in print. If you can do that, you have solved the difference between publicity and news.

Areas of News Interest. Publicity which is published in form of news stories must of necessity be handled principally by local chapters and clubs on account of the fact that local news is in greater demand than national news of equal importance. News has more or less value as it concerns people

or events more or less closely related to the reader. Local news takes precedence over news from elsewhere of equal or greater importance as measured by the general standards of news value. Stated in the form of a rule, we may say interest in news stories is inversely proportional to the distance between the place of the event described and the place where the news story is published. The construction of a comparatively insignificant bridge over the river in our own city has a greater local news value than the construction of an 800-foot span a thousand miles away. That is why local chapters and clubs are so important in publicity plans.

Alexander Black, the editor of the King Features Service, has given engineers some very pertinent and valuable suggestions in the following paragraphs on how to describe engineering works for newspapers.

Remember Your Audience. "No suggestion as to the essentials of popular scientific writing, with newspapers in mind, could have any practical value if it did not lay stress on the matter of the audience. Good writing being not merely the expression of ideas but the communication of ideas, the first step toward popular acceptability is a step straight toward the reader.

"Doing a thing may be a science. Telling about it is an art. So far as the writing is concerned, writing about science must meet the same test as writing about anything else. In any case the communication—that is to say the art—must be as clear:

"First, as the subject demands;

"Second, as the character of the audience demands;

"Third, as the situation of the audience demands.

"The situation of the audience is often overlooked. It may be taken for granted that every one recognizes the special obligations implied by speaking to a popular audience as compared with speaking to a technical audience. What is not so frequently taken for granted is that an audience may not only be popular, in the sense of being general, but that it may occupy different situations affecting the method of reaching it.

The Situation of the Newspaper Reader. "When we think of the magazine we think of the library, the evening lamp, and a fully yielded attention. When we think of the newspaper we think of the breakfast table, the street car, the train, and of the evening lamp again, but less of a sitting-down-to-read attitude. A man may regard the daily paper as the more imperative—he must not miss it—but there is always the chance that he will simply 'look it over,' so that the newspaper, perhaps wisely, usually feels that it has to exert more effort for attention, especially when the matter is not elemental news.

"Attention is a first principle in all salesmanship, whether in ideas or in things. Salesmanship—that is to say, persuasion—must begin with attention, just as it must end with conviction. When attention is less perfect, and where it must be

challenged, there is an obvious need for directness, simplicity, brevity. If the subject is not in itself 'popular,' it should be by plan and presentation related, if possible, to something in which the average person is interested. The need for this is greater where the reader is less likely to read later, to go back to on a later thought, as in a book that 'stays put', that is there to be taken up again.

"In other words, the newspaper reader should not be thought of as a kind of reader, but as a reader in a certain situation—as you might think of a listener in an open amphitheatre as compared with a listener in a small hall or parlor. Some of the world's best literature appeared first in newspapers, yet this literature had to justify itself. Being printed is important. Being read is more important. The editor can't afford to print things that are not read—or not read enough. White paper is expensive. Printing things that are not read is like having speakers in an expensive hall without an audience.

To Write Interestingly. "Many speakers and many writers lose their audiences because they don't begin interestingly and haven't an interesting manner. Some writers can send people to sleep even with a thriller in their hands. Others can make alfalfa romantic. It is a matter of temperament.

"Huxley could write delightfully about science. Any subject has a thrill in it for the right man.

"One who would communicate engineering, and

who is not a professional writer, may choose to accept an old hand's advice not to try to be "literary." Don't write it—say it. The whole trend of good writing is toward colloquial simplicity. As ranting has disappeared from the stage, fine phrases are disappearing from good writing. Some people not only sound written, they sound as if they were singing. In speech they will tell you where they live. In writing they don't live, they reside. They don't begin, they commence. They never 'had a talk,' they 'held a conversation.' In other words, they 'take their pen in hand' and the reader gets the ink on him. The average person doesn't write a personal letter as if he were saying something to a friend. He writes a letter, and it sounds like a letter. Some men make even an intimate after-dinner speech the same way. They don't talk; they speech.

Say It; Don't Write It. "My experience with writers on science and on practical things indicates not so much that they are too complicated as to their subjects as that they are too complicated as to their English. Simply imagine yourself saying it to the policeman and you will be able to keep your feet on the earth. If I can read a thing aloud and it doesn't sound written, I know I am on my way. In the average case quick writing will sound more written than writing that has been worked down to clean terms.

"It isn't a matter of long words or short words. Some long words are very common—commoner than they ought to be. Some beautiful short words

are quite unfamiliar. In speaking to the big audience, words it will accept, used in a way it will accept, are the great consideration. The right word is developed by a feeling for saying it. To get this feeling one must practice saying it. There are many mistaken theories as to what 'the public' will not understand. Most of the disappointments come not from failure to understand, but because the public's natural human interests have not been sufficiently considered and successfully reached."

Writing a Newspaper Article. In order to assist engineers in the preparation of publicity articles, the Iowa committee on publicity has published a manual of instructions from which the following discussion of writing for newspaper use is taken. The discussion was prepared by J. E. Eichinger, Bulletin Editor, Iowa Highway Commission.

"Your publicity committee presents herewith a series of topical outlines for newspaper publicity articles upon engineering projects. These outlines cover all the more common types of engineering enterprises upon which Iowa engineers are engaged and upon which they are from time to time asked to prepare articles for local papers. The object in preparing and presenting these outlines is to make it as easy as possible for the engineer to comply with these requests, and thus to gain the publicity and public credit to which the engineer is entitled by reason of the importance of his profession and his work to the community life.

"It takes no special gift nor special type of mind

to write a story about a sewer system that the public will read. A good newspaper story is made good, chiefly, because of the order and sequence in which the important facts of the story are presented. What is ordinarily termed fine language has nothing at all to do with it. Fine language is ordinarily a detriment to a good newspaper story. Of course, facts must be presented in fairly good English, and should be grammatically correct, and the expression of the thought must be fairly clear, but anybody of ordinary intelligence can write good enough English and express thought clearly enough to make a readable story.

Steps in Building the Story. "Newspaper writers, by hard knocks and long experience, have learned a few simple rules about presenting the facts of a story in order to arrest and hold attention long enough to get the story home. The first, and by all odds the most important, the one that seems almost absolutely essential to general success in preparing newspaper publicity, is to throw the most important feature of the story into what is termed a lead sentence or paragraph. Following this lead thought, and in amplification of it, other general facts are presented briefly and concisely, in order of their general interest to the public. Then, if the article is of some length, details are presented upon which the general facts are dependent. When details are finished, there frequently is a summing up or generalization, sometimes somewhat of a repetition of the facts in the first paragraph of the story, to give it a sense of finished and well-rounded whole.

TECHNICAL TREATMENT

TYPICAL OUTLINE

Sewers and Sewage Treatment

1. **General Type**—Storm. Sanitary. Combined. Treatment plant.
2. **Location**—City. Section of outlet or treatment plant.
3. **Cost**—Sewers. Treatment plant. How paid. Annual operating or maintenance.
4. **Need for Improvement**—Public health and convenience. Storm water removal. Contamination of water supply or natural stream.
5. **Type Chosen and Why**—Sewers. Sanitary, storm or combined. Clay sewer pipe. Concrete pipe. Poured concrete. Block. Segmental block. Circular. Egg-shaped. Rectangular. Soil. Construction or operating conditions which determine type chosen. Topography. Foundations. Availability of construction equipment, and materials. Character and velocity of flow. Outlet. Sewage lifts. Inverted syphons.
Treatment Plant—Grit chambers. Syphons. Type of tank. Septic. Two-story or activated sludge. Screens. Type of filter beds. Intermittent sand. Sprinkling filters. Contact beds. Sludge beds. Sludge presses. Degree of purification required. Available fall at filter beds. Relative costs and degrees of purification. Sludge digestion chambers. Settling basins beyond sprinkling filters. Sterilizing plant.
6. **Size, Length, and Capacity**—Per capita daily flow. Present and provided for. Growth in population provided for. General and in district. Sewers—Mains. Sub-mains. Laterals. Intercepting sewers. Outfalls. Capacity in terms of flow of some well known natural stream depth.
Treatment Plant—Capacity provided at present. Percent completed. Dimensions various chambers and beds. Capacity of chambers in terms of hours flow.
7. **Materials**—Source. Cost. Transportation. Sand and gravel, washing, screening and remixing.
8. **Labor**—Local or imported. Number employed. Wages. Why high or low in this particular job. Specially skilled mechanics required.

9. **Method of Construction**—Digging trench. Hand work or trenching machine. Excavation at disposal plant site. Mixing and placing concrete. Bracing and sheeting trench. Tunneling. Concrete cradle or other special foundation features. Laying segmental blocks. Special features in form work for concreting. Making joints.
10. **Personnel**—Engineer. Contractor. Superintendent. Inspector.
11. **Progress**—Authorization of improvement. Completion of plans. Letting contracts, beginning, rate of progress and completion of construction works or parts of system.
12. **Financing**—Improving certificates. Methods of assessing private property.
13. **Interesting or Unusual Features in Greater Details.**

POPULAR TREATMENT

TYPICAL OUTLINE

The Conquest of City Dirt

1. Anecdote of London when there were no sewers. Then compare with local city in early days.
2. How the first sewer pipe was laid—a wealthy man's privilege to be clean every day. Troubles in early days.
3. Wash day and what it means. How the fashion for white underwear has saved the lives of thousands by eliminating dirt. No dirt means lots of water, lots of water means sewers to carry off the water.
4. How the present improved system was begun in local city.
Who were the prominent citizens that fought for civic improvement?
5. Plan of the new system.
6. Allowance for future growth.
7. Anecdote of work while sewer was under construction.
8. Connecting sewers and disgruntled people to the system.
9. How the flow in the sewer varies.
10. When treated how pure is sewage?
11. What becomes of the "smell."
12. How the treatment plant operates.
13. The men who operate the plant.
14. Story of engineers and contractors who built the system.
15. What the mayor and city engineer are trying to do for city.

A Good Way to Construct the Story. "Not a very bad plan for the novice in the preparation of newspaper stories is to consider that he is given a telegraphic order to tell the important part of his story in, say, a fifty-word telegram, to his employer or some big newspaper. It will require considerable thought and generalization for the first few stories, to get that fifty-word telegram to tell the story. After a few trials, this comes easily, and the essential facts readily group themselves to the front. The next step is to consider that you have aroused interest by your first fifty words and that you are permitted an additional fifty words to be tacked on to the first. This will permit the grouping of the secondary facts of a general nature in the second paragraph. Then play that you are given *carte blanche* order to go ahead and write the full story in detail, without limit of the number of words or space you will fill.

"The busy reader in the city will grab the paper and read the first fifty words. He gets the general idea of your story and the gist of what you have to tell him. He may stop right there. If he is interested, he reads another paragraph and gets more information of secondary importance. Then, if still interested, without any break in the logical sequence of the thought, he can delve into the details and get your entire story. This is just what happens in the newspaper man's experience many times every day. It takes no special gift of language to tell the story, only the knowledge and training as to the manner and sequence of present-

ing the facts, granting that his language be good and the thought clear.

"Writing an engineering project news story is no different from any other news story. When the editor has time to sit down and ask questions, the engineer has no difficulty in giving his information, probably in better language and thought, just as clear as the editor could give.

"The typical outlines on page 86 are suggested for use as an outline for a story, or to suggest an outline which one can prepare for himself. A sentence or two, as the occasion may require, about each topic of the outline will insure a fairly complete and well-arranged newspaper article, giving all the information ordinarily of interest to the general public about such an enterprise.

"The order can be varied or any portion omitted or enlarged at will to suit the project or the pleasure of the writer. Use short sentences, cut the adjectives to the limit, use one and two-syllable words and get the important part of the story to the front, so that if the editor chops your copy after the first three or four paragraphs, you will get by with your story in spite of his scissors."

How to Write for Magazines. The Sunday edition of most modern newspapers is in reality a magazine and the following hints that apply to magazines also apply to Sunday newspapers.

Magazine publicity is ordinarily more difficult than newspaper publicity. There are two reasons for this: first, because the material suitable for

publication in magazines is more restricted than in newspapers of general circulation, and second, because the literary standard of magazines is much higher than it is possible to maintain in newspaper publication, and therefore a greater ability on the part of the writer is required.

The subject matter in magazines follows the trend of current events. Current events are reflected most plainly in our daily newspapers. If our daily newspapers contain engineering publicity it follows that our magazines will also contain material concerning engineers and engineering.

Making Interesting Reading of Engineer Subjects. Articles which are to be successful in receiving the approval of a popular magazine editor must be arranged in an attractive and interesting manner—in other words, they must be well written. Once the article is in good form, however, the result is not merely an acceptance and publication, but the article attracts thousands of readers whose interest in the article itself makes them entirely overlook any possible objection they may have to the publicity feature of the article.

Take one illustration, as a typical example. *Creative Chemistry*, a book by Edwin E. Slosson, can teach many lessons about making interesting reading of engineering subjects. It originated in a series of articles prepared for *The Independent* in 1917-18, "for the purpose of interesting the general reader in the recent achievements of industrial chemistry." The original articles, and the book

• LACKAWANNA •

SAFETY NEWS SERVICE



HAYS ACCEPTS \$150,000 MOVIE DIRECTORSHIP

Official announcement has been made of the forthcoming resignation of Postmaster General Will H. Hays from Harding's cabinet to accept a \$150,000 salary as head of the American motion picture production industry. Mr. Hays is seen being "shot" after the announcement.

Railroading is normally a safe occupation if men will only let their minds work normally while they are on duty. Heaven protect the man who violates the rules.

POPULARIZING SAFETY FIRST

These posters are issued and distributed weekly and contain, in addition to some pertinent messages on safety, a reproduction of some news event. They are patterned after the news-service picture-placards which are now seen regularly in many store windows and which feature the latest news events pictorially. The safety message is printed in large type and in colors. It is short and to the point, as illustrated by that here shown. In this poster, the "news" is in black, and the safety message in bright green. These placards measure about 14 by 18 inches. *Railway Age*, March 11, 1922.



THE Old North Bridge in Massachusetts near which some of the bloodiest fighting of the Battle of Concord took place is an example of local history and engineering structures



A FEAT of engineering that has popular appeal because of the unusual curves of the new highway which are easy of comprehension to the average reader. This road over the Snoqualmie Pass also connects Eastern and Western Washington.



C. A. BOWDEN
SEC and TREAS



ROBERT C. DAVIS
PRESIDENT



F. E. BALLARD
DIRECTOR



A. E. EDDY
DIRECTOR

ENGINEERS ADMIT SIX NEW MEMBERS

Temporary Officers Elected; Chapter Pronounced In Good Shape.

With temporary officers elected the chapter of the American Association of Engineers of the Middle West, which met last night at the Hotel Hamilton, of Chicago, for its first meeting since the chapter was organized, the chapter was pronounced in good shape. The chapter was organized last night at the Hotel Hamilton, of Chicago, for its first meeting since the chapter was organized. The chapter was pronounced in good shape. The chapter was pronounced in good shape.

The public is primarily interested in people. How pictures of the organizers of the American Association of Engineers were used in a pleasing manner in a local newspaper.

itself, have been read by thousands of people who were interested in the author's presentation of otherwise "dry" chemical facts, and without question there has been a tremendous amount of valuable publicity for the chemical profession as a result. The same can be done with engineering subjects.

Take as example one passage in the first chapter of the book. The author is speaking of nitrogen, in its fixed and free forms. "The air is four-fifths free nitrogen, and if we could absorb it in our lungs as we do the oxygen of the other fifth, a few minutes' breathing would give us a full meal. But we let this free nitrogen all out again through our noses, and then go and pay 35 cents a pound for steak and 60 cents a dozen for eggs in order to get enough combined nitrogen to live on." We all learned the essential facts of these passages from our text books, but in different manner!

Prepare "dry" engineering accomplishments in similar form, and you will not lack a medium for spreading these accomplishments broadcast for popular consumption. Make easy reading out of your engineering subjects; but don't expect wide publicity from engineering reports—the text book type which never get attention beyond the individuals vitally concerned.

STATE OFFERS LOW SALARIES

Engineers Not Attracted by
Highway Jobs.

Thirty-five Have Been Taking Night
Course in Preparation, but Are
Not Tempted

Following the discovery that engineers in charge of construction would be paid only from \$1,500 to \$2,100 per year, there was a perceptible coldness on the part of Chattanooga engineers last night toward seeking employment under the state highway commission in building the \$8,000,000 worth of roads which are to be constructed this year.

The plans of the highway commission were outlined by Prof. Dougherty, principal of the civil engineering department of the University of Tennessee, before the semi-monthly meeting of the Chattanooga chapter of the American Association of Engineers. Prof. Dougherty stated federal requirements would be followed, which means that a supervising engineer must have had at least two years' of actual experience in road construction and several years' additional experience in other kinds of engineering.

With the idea of taking advantage of the year jobs in supervising the big road program, thirty-five engineers have been taking special instruction in road engineering under Prof. H. B. Smith in the night school, which is being conducted by city authorities. Nearly all of these men anticipated taking the positions, but the course as outlined last night makes it doubtful *(Chatt. Times)*

STATE PAYS ENGINEERS WHAT THEY ARE WORTH

Commissioner Moore Talks to
Engineer Society—Resolutions on Dietz's Death.

In speaking of the discussion concerning low salaries paid highway engineers by the state that came up at the meeting of the local engineers Wednesday night Commissioner W. F. Moore of the state highway department, said this morning that the engineers are being paid from \$150 and upward a month, including expenses. He declared that the expenses amount to from \$50 to \$75 a month.

When asked what the maximum for the salaries is Mr. Moore said that there is no maximum, but that the engineers are paid according to their worth. He also pointed out that every man who has stood the examinations is at work and that this would not be so if it were not that the proper salary was being received by those qualified to take these state positions. Mr. Moore is in the city to attend the his automobiles club meeting.

Prof. Dougherty, civil engineering instructor of the University of Tennessee, spoke to the engineers at their Wednesday night meeting. After hearing Prof. Dougherty's talk it was the opinion of a number of the engineers that few of the experienced ones will leave their present employment to accept the low salaries offered by the state, as explained by Prof. Dougherty. This decision was reached by them, taking into consideration that they might pass the required examinations.

The civil engineering instructor said that salaries for the state highway engineering work are to be from \$1,500 to \$2,100 per year. The American Association of Engineers recommended a scale of salaries for the same positions of from \$2,400 to \$4,000 per year.

The engineers pointed out that the highest position, or chief engineer's salary is only \$4,000 a year. This, they state, is very low for a man who has the responsibility of spending \$8,000,000 for road construction. The American Association of Engineers recommends \$15,000, at least, for such a responsible position. *(Chatt. News)*

CHAPTER V

THE PUBLICITY MAN, AND WHAT HE NEEDS TO KNOW

Picking the Publicity Man. Since publicity must be sincere, honest, fair and careful, not given to over-statement or exaggeration, it follows that the publicity man, too, must be marked by these same attributes.

If publicity is the art of bringing matters of public import to the people for their consideration, it follows that the first thing necessary is to gather together the information that is to be given out.

The Association of Railway Executives probably has no more important department than the Bureau of Railway Economics at Washington, an organization which has gathered, and is constantly taking in more information of every conceivable sort about the railroads of this and other countries of the world than probably could be found in any other one place. From this well-spring flows a current of dependable facts.

With the proper sort of publicity organization started, the questions to ask are, what are the situations affecting the profession which may be improved through publicity work; and, second, have the men who are doing publicity work in local chapters a co-ordinated plan of action under centralized direction?

Opposite treatment of the same news.

The public is made up of a large number of groups varying in size, each of which is interested from a different standpoint, hence party newspapers, business and trade papers, literary magazines and other public information mediums exist.

It is difficult to appreciate the variety of things one has to know in order to accomplish successful public relations work, but a study of the check list of activities on page 42 will give some idea of the scope of the work. It is almost impossible for one man to have a comprehensive knowledge of all the different work that has to be done. A wide experience in many lines of work and a broad sympathy probably constitute the best training for this work. A public relations man must have, in addition, keen judgment, a pleasing personality, a nose for news, the ability to write, and he must know what people want, and what they are interested in. It is work for a man of buoyant, well-poised temperament and a thorough education. He must have the poise of an editor, the vision of a promoter, the aggressiveness of an advertising man, the accuracy of a scientist engaged in research work, the suavity of a diplomat, and he must be thoroughly imbued with the idea of developing the interests of other people rather than his own. He must be content to be a Boswell to many Johnsons.

The Need for Voluntary Effort. In approaching this subject of public information the first step is to select someone whose business it is to know what the public will read and what the public won't read. This means a great deal of help from local engineers—voluntary help from men who can give each a small amount of time to the work. While voluntary effort must not be too much depended upon, its value is beyond computation. There is something that springs from honest and

earnest volunteer effort that no amount of money will ever buy.

Some Special Jobs for the Public Information Man. With the local publicity man selected and on the job, there are several things this man can do in addition to the actual preparation of news articles and items. One is to develop the local interest of engineers in the local problems; to emphasize that the engineer cannot be made publicly known nationally until he makes himself known publicly in a local way.

When an engineering work is finally dedicated, it too often happens that the higher city officials and prominent citizens do the talking, and the engineer stays in the background. One thing the engineer needs is contact with other men—with men in business and in other professions. When an engineer ceases practicing engineering as a trade, and begins to practice it as a profession, he is thrown in with groups of men who are not engineers, including lawyers, bankers, and business men. Men who have risen high in the engineering profession are nearly all men who have acquired a broad general education outside of engineering. Tell the story of the engineers who have achieved.

The question of publicity in the smaller towns is one which needs careful attention. In every state there are many engineers who have to get their support in the smaller towns and communities, and they need help and education along publicity lines. To accomplish consistent and helpful results, someone should be paid to do the publicity work. There

are not many who have time to do this work. If someone is on the job all the time sustained publicity methods can be used.

If there is only volunteered effort, about the best way to work it is through intensive publicity campaigns at times concerning particular matters. It is pretty hard to get a man who, in addition to his regular work, will keep things going smoothly from day to day. But quite often one will wake up and spend a few weeks or a month putting across a special campaign of publicity.

Engineers should seek civic positions, where their particular work would not have any special, distinct engineering problem to solve, or engineering bearing, but would show that the engineer can be a perfectly good citizen in all branches of civic organization. The publicity man can show how these engineers are qualified for civic work.

The publicity man can often do much to counteract the incorrect impression which often prevails that ordinarily in seeking publicity you have to do something a little different, perhaps underhanded, in order to get it over. There is nothing in that. If you do something and know how to tell about it, it will go. Talk about the constructive things that are being done in a way that the public will understand.

Don't Be Too Modest. Often engineers are over-modest in sending in items about themselves. The publicity man can do much to overcome that tendency. Editors of technical journals have to solicit items constantly about persons, whereas, as

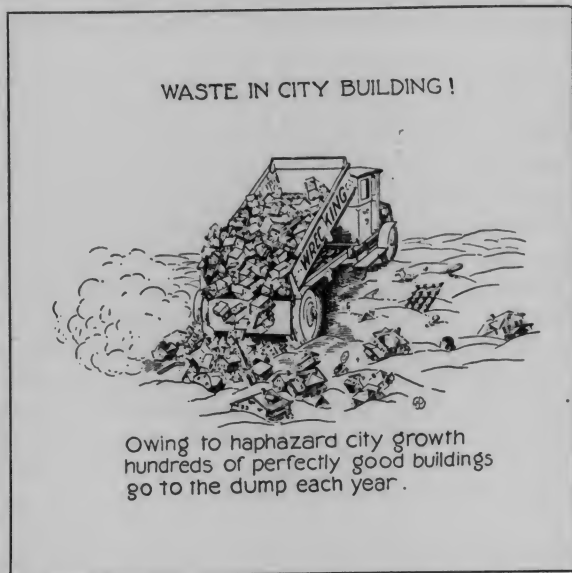
a matter of fact, they ought to come freely from the individuals. The publicity man can stimulate these tremendously, by urging individuals to keep up a flow of that sort of items. The development of the personals in the technical and other journals is a simple way to get publicity along these lines.

Contacts with Civic Organizations. There are innumerable civic, trade, and social organizations such as chambers of commerce, Rotary and Kiwanis Clubs, women's clubs, real estate boards, boy scouts, and so on. These organizations can be invaluable in providing appointments for speakers on engineering subjects and speakers before engineers on business subjects, and in many other ways.

It will pay to remember that women are becoming very much interested in the affairs of the cities, the states, and the country. Before long women will cast the deciding vote in many movements. A number of cases have occurred where women have supported engineers for public positions. They will do it anywhere when the problem is put up to them in the right way. They are seeking the truth, and they will vote for the best candidate they can get.

Don't Clog the Channels. One warning all publicity men should keep in mind—it is possible to overdo their work and lose the confidence of local newspaper editors. Much attempted publicity has been sent out broadcast, item after item, to mediums to which such broad general material is worthless.

There is more publicity sent out that is utterly worthless than the average man has any conception of. It is fatal to the business that attempts it. It clogs the journals which you must eventually



A typical campaign cartoon used in promoting city zoning in Atlanta, Georgia.

use, and organization after organization, as well as private concerns, have defeated their purpose by sending out small, foolish, continual streams of dead stuff that piled up and up until finally, when the big story broke, there was no opportunity to

get it through. They had cried, "Wolf, Wolf," and there was no wolf, and when the wolf came, no editor could be convinced.

Beware of that clogging process. Keep in mind the idea that you must go gently and jump at every apparent opportunity to use your publicity chances, but send out the live stuff so that the local editors will know that they are getting stuff that is dependable and live, and when the big thing breaks, all the space you want is yours. Pave the way for the big story, by preparing little, live stories for that big thing that is going to come through.

This suggestion has been made by one Association chapter, where it has worked well: "Put in your city newspapers, at as frequent intervals as you can, a paid advertisement at the regular rates. It may be only a notice of a meeting, three or four inches of single-column announcement. Do it regularly, and you will find that it is only human nature that your news items will sometimes find a warmer reception when you take them to the newspaper."

Newspaper Syndicates. It is well always to keep in mind that a newspaper syndicate is about the easiest way to reach a great many people. Of course syndicate material has to have a wide appeal. If you understand just what people want you frequently can place stories with the newspaper syndicates. They are glad to get them, if the stories have the proper elements.

Hints on Organization. There are many details to be learned before a man can be reasonably sure

of himself in public relations work. Some of these details are briefly discussed in the following paragraphs. The check list of public information mediums on page 42 indicates the scope of knowledge necessary.

Parades. A parade is an effective form of demonstration, because it reaches people who would not come to a meeting. In engineering publicity work it is usual that an organization will have a float in a parade, rather than organize a parade as a strictly technical activity.

Many ideas have been successfully used in preparing floats by various chapters of the American Association of Engineers. A simple form of demonstration in a parade is merely to have a body of men marching. These men may carry streamers or signs. Sometimes a distinguishing mark is adopted like the "silk hat of Tammany" and the "umbrella." Occasionally it is desirable to use uniforms. Uniforms are effectively used by a social organization and secret organizations.

Following is a typical parade announcement:

Chief of Police — will be marshal of the parade and will be followed by the most remarkable line of floats, horseback riders, automobiles, groups of singers and bands that has ever marched through the streets of the city. Every business house and fraternal organization has been invited to cooperate. The parade will begin at 12 o'clock noon, starting at 12th Street. It will observe the following line of march: North on Michigan to Jackson Boulevard, west on Jackson to LaSalle Street — (complete

line of march) — and marches to State Street, where it disbands.

At grandstand opposite the — Hotel will be a chorus of one thousand, forming an American flag, and three hundred singers, arranged to represent the United States Shield.

Convention Exhibits. Conventions are the occasions for the preparation of exhibits, for at that time prominent men, interested in some particular line of work, are gathered together and they can be reached at one time. Only a few of the basic ideas used at conventions will be given here.

As a rule, convention exhibits should have unity. The exhibit should be planned to have anyone who attends it leave with some one definite idea. A mere display of many different things of interest or curiosities will not produce the results that skillful methods of handling an exhibit will produce. It is a good idea to have something in the exhibit that moves. This will attract attention. Avoid small pictures. Use plenty of large label cards, with large type for lettering. Avoid lengthy notices. Avoid having an overcrowded exhibit.

Displays in merchants' stores, windows, and on sidewalks are useful means of presenting an idea. Engineers' Week in Missoula, Montana, which is described in detail in Chapter VI gives an idea as to the varied use of displays. Exhibits in public schools, posters and other work by school children, including contests, were used very effectively in the Engineers' Week contest. This is a most effective method of getting a subject talked about and can

BRANCH
(Stamp Name and No. Here)

Ford Educational Weekly

Released by
FITZPATRICK & McELROY
CHICAGO

Non-Theatrical

Producer's Copy

Key No.
Contract No.
Substance

Dated 1921

Non Theatrical Subscription
(including War Tax)

10 PER CENT—CASH DISCOUNT
\$2.20
Based on Full Rental upon pay-
ment of total subscription of \$2.20
in advance reducing full year's sub-
scription to
\$46.80
Rental \$2.24 \$49.14
Tax

PARTIAL PAYMENT PLAN
Initial payment.....\$11.00
Second.....12.00 .55
Third.....12.00 .55
Fourth.....12.00 .55
Bills for second, third and fourth
payments will be payable prior to
payment of 21st bill, return of year's
subscription.

Non-theatrical subscribers may sub-
scribe for the Ford Educational Weekly
on terms of 12 months payable in ad-
vance.
Starting date requested.....1921

With release No.
Paid \$.....
on signing by subscriber.

To (Member National Exchange of American, Inc.)

The undersigned, as Licensee, subscribes for and agrees to accept and publicly exhibit each week,
for consecutive day(s), at the
only, in State of on the date or dates

designated by you, a print(s) of each of issues of the FORD EDUCATIONAL
WEEKLY, released by you, to pay you therefore the sum of Dollars and
Cents (and no more) per week, to be paid by you to the Licensee, on the date of the Rental
Act of 1918, a sum equal to five per cent. (5 per cent.) of the rental payable, and any other or further
tax that may be based upon the sum payable hereunder as rental or imposed for the use of the Weekly;
and to indemnify you for and against all and sundry claims, damages, costs and expenses, including
attorney's fees, which may be made against you after the date of the last exhibition of each print in each week. You may cancel this agree-
ment upon fifteen days' notice in writing in which event you are to repay the pro rata charge for each
issue paid for and not delivered.

Years, etc.,

ACCEPTED AND \$..... RECEIVED

By..... Exhibitor

Manager

Sitting Capacity

☒ Days of Week Requested, Mon. Tues. Wed. Thurs. Fri. Sat. Sun.

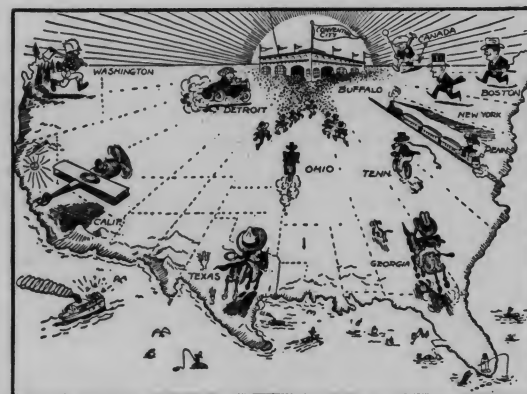
Address

Form of contract for booking educational motion picture films.

be used in engineering publicity work to a much greater extent than it has been used in the past.

Advertisements on theatre programs and score cards can be used at times but these mediums are generally expensive.

Motion Pictures. There are two types of mo-



Cartoon poster advertising a convention that was sent to chapters as a photostat, 14 by 21 inches in size.

tion pictures that can be used for publicity work. The first consists of slides and short news films for use in motion picture theatres, and the second of general interest motion pictures for use in schools and theatres.

Motion pictures are handled on what are known as circuits. For example, the Ford Weekly is handled through various district offices and releases are obtained from these offices. The Ford

Weekly is perhaps the largest engineering educational motion picture syndicate in the country and their pictures can be used to advantage.

An Educational Motion Picture Syndicate. A unique organization for educational work, which is endowed and supported by contributing life members, is the Bureau of Commercial Economics, Washington, D. C.

A requirement of this Bureau is that its pictures must be invariably displayed to audiences admitted free. The service of the Bureau is available to educational institutions, civic organizations, different trade conventions, and welfare organizations, and it is also provided with motor truck equipment for projectors operated from auto trucks, in parks, playgrounds, rural communities, and other public centers.

The scope of the Bureau is international both in the source and display of its films.

Stipulation for Film Service. Any organization which desires to use the films of the Bureau may have the privilege under the following stipulations:

1. Payment of transportation charges from and to the distributing center.
2. The films shall be used on standard motion picture projectors, handled by competent operators.
3. A report of films used and attendance shall be mailed after the performance to the distributing center.
4. Films shall be returned immediately after use.
5. The exhibitor accepts full responsibility for the films while in his possession.

No fee whatsoever is charged or accepted for the use of the films of the Bureau.

No admission fees to the public are permitted to be charged, nor are collections, during or after the exhibition, permissible.

If films from other sources, such as advertising films, films of advertising associations, or films which have been rejected by the Bureau, except literary and similar films rented from the commercial exchanges, are shown in conjunction with the films of the Bureau, the Bureau reserves the right to discontinue the service.

Owing to the great expense in the production of film, the Bureau must be informed as to the projection apparatus employed, as it is obviously necessary to protect film equipment against injury.

Producing Motion Pictures. An outline or scenario is first prepared. This gives the story and the ideas that you wish to convey. The outline is, of course, subject to modification in making. Changes are minimized, however, by working up the action before going into the field, so that the picture may be taken according to a well-defined plan.

The next step is to obtain information as to the best places to procure the pictures that fit into the outline and the time at which they can best be taken. These scenes are then located and the camera gets on the job, arranging the scenes. After a study of conditions existing on the ground has been made, the best method of procedure is decided upon. The pictures are then taken and the

photographer returns to his studio. The film is developed, the titles are prepared, and the prints for exhibition are made. After the exhibition of these prints, unnecessary portions of the film are cut out and the picture is completed for service as a phantom assistant. The negative of the film corresponds to the negative of an ordinary picture and is stored away. As many prints as desired can be made from this negative.

Motion picture films are always wound on standard reels, which have a capacity of approximately one thousand feet of film. This film passes through the camera at a speed of about one foot per second, and there are sixteen pictures, three-quarters by one inch each, on a foot of film. In exhibiting the pictures on the screen the film passes through the projecting machine at the same speed—one foot per second. The time required to exhibit a reel is, therefore, about sixteen and one-half minutes. Titles are made in the laboratory by photographing printed cards. The length of film required for each title depends, of course, on the number of words in the title. A common rule with motion-picture producers is to allow one-half foot of film for each word in long titles and three-quarters foot of film for titles of not more than three words.

Suggestions on Exhibiting Motion Pictures. Portable projectors about the size of an ordinary suitcase, and very simple to operate, may be used to exhibit the films. The points to remember in connection with the use of the projector are:

Always use a screen unless a white or nearly white wall is available.

For a long throw use a long focus lens to procure a picture not over nine feet by twelve feet in size.

Show pictures at a speed of one foot per second. This is approximately one complete revolution of the hand-crank per second.

Arrange the picture so that parts of two scenes do not appear at once on the screen. Do this quickly. Slowness provokes comment from the audience. Learn from a private exhibition of the reels what they show before attempting to exhibit them in public.

Do not try to explain things the pictures show clearly. The pictures are more convincing than words. Study the effective use of films and the proper time to show them. Much depends upon the smoothness with which they are exhibited.

These are the main points. The rest depends upon the punch that is in the picture and the care with which it has been taken.

Operating a Speakers' Bureau. In arranging to get speakers to address meetings it is always wise to get the best talent possible, particularly for the main speaker. If the main speaker is technically inclined, the other speakers should be non-technical, to balance the program. Talent may be obtained from lyceum bureaus and from the heads of engineering organizations, or selected from among prominent members of the chapter. Arrange for a suitable short introduction of the principal speaker, and try to make him comfortable in every way possible. Ask the speaker to have sev-

eral copies of a short abstract of his remarks prepared prior to the delivery of the address, or get an advance copy of the talk so that the publicity committee will have this material available for the press.

Where there is much expense attached to obtaining speakers it is well to prepare a program and advertise with posters placed in store windows and by paid space in the newspapers. Tickets may be sold and the cost of the speaker defrayed in this way. Lyceum bureaus have special men who make it a business to arrange for the financing of their speakers. These men can give valuable assistance in outlining the methods to be followed.

Specialized subjects for speakers should be avoided so that the greatest possible attendance may be assured. Very technical subjects are also to be avoided, unless they are handled in a popular way.

It is frequently possible to co-operate with local civic organizations in obtaining high-grade speakers. A course of talks may be given under the auspices of the combined business organizations in the small towns that will be very valuable both to the engineering profession and to the general public. The engineering publicity committee should always plan to handle the reports of the speakers independently and to see that they are circulated thoroughly among the newspapers and sometimes to the magazines.

Furnishing Speakers to the Public. The best

speakers in the chapter should be organized in a speakers' bureau to furnish able men on different occasions to talk before various civic organizations, in the public schools, at boy scout meetings, and in other places where their services are needed and asked for. Let the civic organizations know that the services of these men are available and they will have plenty of opportunities to speak. The publicity committee should be sure that these men have carefully prepared addresses that will be a credit to the profession. They should have abstracts prepared of these talks for the use of the press, and should see that they reach the press in due time.

Handling Announcements. An effective and a very inexpensive method of making announcements is through schools, auctions, public events, and societies, especially in small towns. When an event of special interest to the town is to take place a typewritten notice should be sent to those people who preside at the different meetings with the request that they read this notice at the next meeting.

Committee Memberships in Local Organizations. Men who are qualified along special lines should be urged to join the various civic organizations and to become members of committees. In this way the engineering profession gets a representation on different civic boards and much constructive influence can be exerted. Many such opportunities are presented and they should all be taken advantage of.

Community Disarmament Meet

UNDER AUSPICES OF

THE WORLD FRIENDSHIP BUREAU

Social, Civic, Educational and Religious Organizations Co-operating

THE COLISEUM, November 28, 29, 30, 1921

Band Concert and Community Singing at 7:30 P. M.

Speaking at 8:00 O'Clock



WILL IRWIN

Monday, November 28

WILL IRWIN
SPEAKS ON

"THE NEXT WAR"

What would it cost?
How can we prevent it now?

Tuesday, November 29

Illustrated Lecture on the
Washington Conference

on Limitation of Armaments

To discuss the making of the plan
FRANK CHAPIN BRAY
of the Library Report Editorial Staff

Wednesday, November 30

Symposium on
DISARMAMENT

by Representative Speakers for

JAPAN, CHINA, ENGLAND
FRANCE, ITALY, AMERICA

Reserved Seats 25c, 50c and \$1.00

SEND TO THE

World Friendship Bureau

1010 Fine Arts Bldg., 410 So. Michigan, Chicago

PHONE WABASH 5347

OR AT THIS OFFICE

ORGANIZATIONS ARE INVITED TO COME AS GROUPS AND BRING THEIR BANNERS

Typical poster used to announce a mass meeting. Size of original 21 inches wide and 13 inches high.

THE WORLD FRIENDSHIP BUREAU
Room 1010, 410 S. Michigan Avenue, Chicago, Ill.
Phone - Wabash 5347

Greetings:

November 19, 1921.

The World Friendship Bureau invites your co-operation in announcing the Disarmament Meet to be held at the Coliseum, November 28, 29 and 30, in putting up posters that will be sent you, circulating the subscription blanks for reserved seat tickets, and encouraging the group participation of your organizations.

If the quantity of subscriptions from your group for reserved seat tickets to be delivered to one address totals not less than twenty-five dollars, a discount of twenty percent can be made from the regular rates.

Please send in reserved seat subscriptions at as early a date as possible.
Yours in the work for International Good-will and reduction of armaments.

WORLD FRIENDSHIP BUREAU

GENERAL COMMITTEE FOR DISARMAMENT MEET

S. J. Duncan-Clark, Chairman.
Everett W. Lothrop, Treasurer.

per Mary L. Read,
Director.

SUBSCRIPTIONS FOR DISARMAMENT MEET, THE COLISEUM, NOVEMBER 28, 29, 30, 1921.

THE WORLD FRIENDSHIP BUREAU
Room 1010, 410 S. Michigan Avenue, Chicago, Ill.
Phone Wabash 5347

Please send reserve tickets as checked below:

				Totals
For Nov. 28, Will Irwin, "The Next War" -	_____ seats @ 25¢	_____ seats @ 50¢	_____ seats @ \$1.00	\$ _____
For Nov. 29, Frank C. Bray, "The Washington Conference" -	_____ seats @ 25¢	_____ seats @ 50¢	_____ seats @ \$1.00	\$ _____
For Nov. 30, Symposium and Convocation on International Good-will -	_____ seats @ 25¢	_____ seats @ 50¢	_____ seats @ \$1.00	\$ _____
Total amount enclosed.....				\$ _____

NAME _____ Phone _____

ADDRESS _____ Date _____

Name of Organisation _____
(If seats are desired with an organization group)

Top—Letter of announcement calling for attendance at a mass meeting, assisting in giving publicity to the meeting.

Bottom—Accompanying blank form for reservations.

Distinguished speakers, a band concert, and community singing are used as a means of increasing attendance.

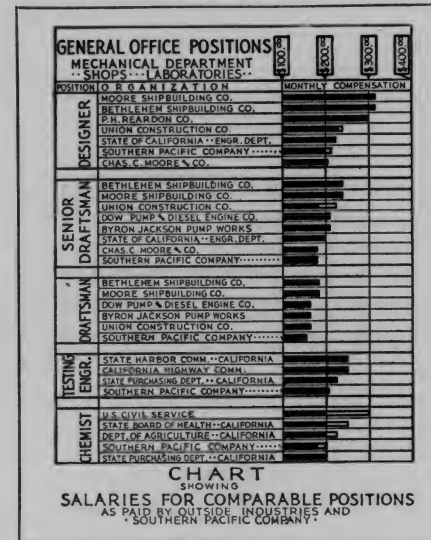
Direct by mail announcement.

Personal Work of Organizers. The most direct method of accomplishing immediate and lasting results is through a paid organizer. The details of such work are too voluminous to be discussed here, but in the main they are simply the rules of salesmanship.

Mass Meetings. A mass meeting, to be effective, must be held at a time when the public is ready for action. There must be existing an immense amount of public interest about the object for which the mass meeting is called. The ordinary procedure at a mass meeting is to select a chairman, have an open discussion and also appoint a committee on resolutions, and have the resolutions reported to the meeting. Mass meetings are always a subject of comment for the newspapers and are most effective methods of arousing public notice on any subject of public interest.

Receptions to Special Groups. When an engineer of note visits town some effort should be made to provide a fitting reception for him. This usually consists of the appointing of a committee, providing hotel accommodations and entertainment while the visitor is in the city, and any special meetings which may be desirable. It should be remembered that most prominent visitors are over-entertained rather than under-entertained. Be sure that breathing spells are allowed your visitor and he will leave with a much higher opinion of you. Consider his convenience first. For being entertained is a strenuous business, in many cases, for the one who is entertained. Always ask the

visitor whom he would like to visit before the introduction. This is only courtesy. When an important organization holds a meeting in the city it is frequently possible to give them a reception. In



An excellent form of comparative chart.

this way very often friendships are formed that are of great value in future business connections.

Technical Methods. The detailed methods used in some typical promotional problems are given in Chapter VI. It must be remembered, however, that ingenuity is the chief asset of the publicity man. Methods change continually. Methods good to-day are frequently worthless to-morrow.

1922 Publicity Contest

ON SEPTEMBER 1, the publicity contest for 1922 begins. The rules for this contest are given on this page. Each year publicity contests have produced better results and have succeeded in arousing the interest of the chapter in advancing the interests of engineers. This year the rules have been simplified and there should be little difficulty on the part of various chapter publicity committees in submitting publicity.

Special attention is called to the rule that all publicity must be pasted in strings. Many of the difficulties that have arisen in previous contests will be obviated by strict adherence to this rule. Also, publicity must be certified, in order to be credited.

Divisions

- Division One — Chapters in cities of 200,000 or over.
- Division Two — Chapters in cities of 50,000 to 200,000 population.
- Division Three — Chapters in cities of less than 50,000 population.
- Division Four — State Chapters.
- Division Five — Student Chapters.

Rules

Paste clippings in string with name of paper and date of issue on reverse side of each clipping and place certification at bottom of each string. Send in publicity strings at the end of each month only.

Publicity must contain the words "professional engineer" or the words "American Association of Engineers" and be printed as a direct result of the efforts of the chapter or club submitting the publicity.

Items printed in chapter bulletins will not be considered in the contest.

Prizes

At the close of the contest on March 31, 1922, the total number of column inches of publicity of each contestant will be measured and the winner determined on the basis of the amount of space obtained by those in each division. Division winners will then compete to determine which of them has the highest quality of publicity. Judges will be appointed by the National Executive Committee.

A certificate for framing will be presented to each division winner.

The grand prize will be a decorated banner, showing the name of the winner for the year. Permanent possession of the banner can be earned by winning three years in succession. The banner is now held by Missoula, Montana.

How an association contest was conducted.

Service Precedes Publicity. Once more, let the publicity man remember that publicity is based on public service. The better the public realizes what engineers can do for them, the more the public will do for engineers. There is no limit to what engineers have done, can do, or will do.

The following story of what one engineer did in politics, with the help of other engineers, illustrates how true public service brings the only really valuable publicity. A few years ago the better element of Philadelphia—which is in the majority in every city whenever it is unified—ousted a certain political organization and elected an old Quaker as its mayor. He went to Frederick M. Taylor, the great pioneer in scientific management, and asked him, "Can scientific management be applied to the affairs of municipalities, as you have applied it to manufacturing industries?"

"In some ways, better; in some ways, not so well," was the reply.

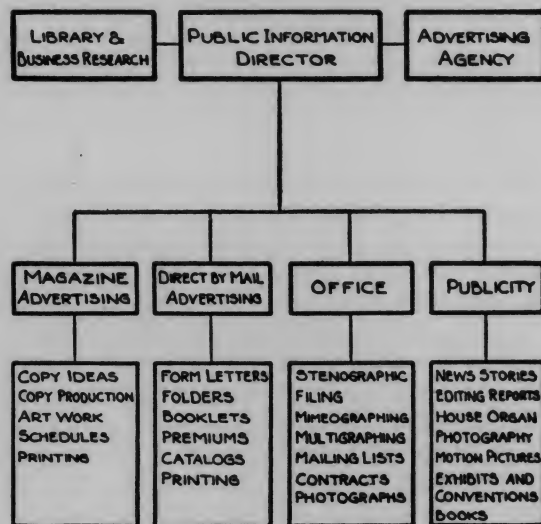
The Mayor said, "I want you to take the job, then, as Director of Public Works of Philadelphia." Mr. Taylor replied: "I can't do it. The principal reason is that the doctors have given me just two years to live, but I know a man who will be delighted to have the opportunity to show what engineers can do in that line."

One of the first things he did was to call in several prominent engineers, and they ripped into a new wall, for which the people of Philadelphia were to pay two million dollars. They found railroad ties, ashes, and everything else, where there

A. Calahan
Publicity Committee, Chairman

It should be remembered that only part of the people know what the other part is doing, and the

story is interesting to one which is commonplace to the other. Any organization must consider its own affairs as also the affairs of other people. It is the job of the public relations man to educate people as to what is going on in the field over which he has supervision. He is an ambassador



Functional organization of a typical public information department.

Note.—This plan for a public information department is developed for a complete organization acting independently and covering the entire field of sales and institutional advertising, and magazine and newspaper publicity. No provision is made for service work or bookkeeping, and but small provision is made for co-operative work in educational institutions.

from his organization to the public at large, and the mediums and methods that he uses are those that will best tell the why and wherefore, and will be educational in value. The object is not so much to sell goods or to inculcate ideas as it is to improve the environment in which people live; and unless public relations work is based on this broad conception, it will be largely futile.



An unusual meeting announcement.

CHAPTER VI

TYPICAL PUBLICITY PROBLEMS

Engineers' Week in Missoula

Presenting Engineering Activities to a Community

With a slogan as a keynote, the Missoula Chapter of the American Association of Engineers staged an "Engineers' Week," March 13 to 20, 1921. The object was to bring before the general public the importance of engineering work and engineering principles in the daily life of the community. The measure of success achieved was summed up by the Mayor of Missoula, Montana, and the manager of the Missoula Chamber of Commerce at the Engineers' luncheon when they both stated that the organization had shown the community that they were interested in and equipped to handle efficiently local problems of an engineering nature.

Here is the story of the demonstration as told by W. J. Scofield, in *Professional Engineer*, May, 1921.

First, a formal application for membership in the Missoula Chamber of Commerce was made and granted in the name of the chapter secretary, who appointed some member to serve on each Chamber of Commerce committee dealing with problems of an engineering nature.

This first important step in community co-opera-

tion immediately emphasized the need of informing the general public of the importance of engineering in the daily life of the community. The president appointed a committee of five to arrange for "Engineers' Week." This committee drafted into service the entire membership.

The committee offered a \$5 prize to the school boy or girl submitting the best slogan to be used during the week. A boy of 14 years won the prize.

Efficient
engineering
insures
effective
economy

Prize-winning slogan in Missoula contest.

Much interest was created among the school children of the community, and this interest reached its height on Saturday evening of the week, when over 200 students attended an interesting motion picture show, prefaced by short engineering talks, given in the high school auditorium.

The committee was swamped with ideas and suggestions for the Week, many of which had to be discarded or abandoned on account of the lack of time or money necessary to make adequate preparation. The Missoula mercantile establishments very liberally donated their window space for display purposes and fifteen windows were used as follows:

1. Road and bridge display.
2. Engineers' shoes and clothing.
3. Electrically operated pumping system.
4. Hydraulic display.
5. Map and mapping.
6. Chemical engineering.
7. Grade crossing separation.
8. Engineering tests.
9. Engineering in China.
10. Engineers' hats.
11. Engineers' rations.
12. Engineering instruments.
13. International Correspondence School.
14. Engineering equipment.
15. Electrical motors.

The grade crossing display attracted the most attention. Only a few days previous a crossing accident had occurred a few miles east of the city. The remains of the automobile as drawn into the city on a truck were shown in a photograph in the window with a list of the parts salvaged and an estimated cost of the elimination of the crossing. Part of this display is illustrated on page 73.

A placard, "Patrick, the Patron Saint of Engineers," with a green bow thereon appeared in each window on March 17; and the newspapers printed a short story about the Guard of St. Patrick, an organization of several middle-western engineering schools based on the legend that St. Patrick was an engineer and is therefore the friend of engineers.

A restaurant featured an Engineers' dinner on their menu cards for Monday of the Week. Moving pictures of engineering projects were featured at the various theatres of the city and served to in-

terest large audiences in the importance of engineering activities.

On Wednesday evening the Chamber of Commerce and Rotary Club were guests of the engineers in the Chamber of Commerce club rooms, where both organizations were well represented. Addresses were made by George Weisel, president of the Chamber of Commerce, and John N. Edy, chief engineer of the State Highway Commission, which particularly brought out the fact that a spirit of co-operation is necessary between the engineer and the public before any important community program can be successfully carried out. Motion picture films were also shown of the Washington Water Power Companies hydro-electric development and of modern concrete road construction.

The week was full of earnest endeavor; and, if we are to judge by the many compliments bestowed upon us by Missoula business men, it closed a week of distinct engineering progress in this community. A final Engineers' luncheon was held on Saturday.

Success was made possible only by the wholehearted support of the members, the co-operation of Missoula business men and commercial organizations, and the generous assistance of the Missoula newspapers, which furnished an average of a column a day devoted to engineering articles of more or less local interest. These articles showed the wide diversification and application of engineering, besides giving proper space to the meetings and activities of the week. Without any re-

duction of his quality standard the chairman of the publicity committee and his assistants were able to obtain about 600 column inches of publicity during this week alone. As one editor said after the week, "The public was not allowed to lose sight of the significance of engineering."

Promoting a National Highway

Following are some of the methods used in promoting the Custer Battlefield Highway through South Dakota, methods which are typical of this class of work.

An association was formed and a committee to carry on the work organized. This committee obtained money from cities along the route of the highway and a paid secretary was employed. This secretary continued the work of obtaining money by pledges and in one year held seventy-two meetings, raising in pledges over \$100,000 and collecting in cash about \$2,000. As many as six employees were engaged on the promotional work of the organization in the busy season.

Road Reports. Postal card reports of road conditions were issued every Saturday from the main office, giving information obtained from advertisers, secretaries, directors, and the state highway department. The highway was divided into sections for easy reference. The total edition was about 170 postal cards a week.

Direct Advertising. Printed matter was distributed as follows: 9,000 pieces at different automobile shows, 44,000 pieces through the main

office, advertisers, commercial clubs, and chambers of commerce, and in other ways, making a total distribution of 86,000 pieces of matter. The postage bill for July, a busy month, not including pamphlets and matter sent by express, was \$108.26. During the summer, an average of twenty-five letters were received and in two days sixty-seven inquiries came in. Three assistants were employed to handle extra work.

Automobile Demonstration. There were fifty-three automobiles in a caravan organized by the Boy Scouts which traveled over a route through South Dakota and Northern Wyoming to Yellowstone Park. The caravan travelled on schedule and was well received throughout the route.

Magazine Articles. Magazine articles about the highway appeared in the *New York Times*, *New York Evening Post*, *Chicago Record-Herald*, *Chicago Examiner*, *Popular Mechanics*, *Review of Reviews*, and other publications of national circulation.

Registration Bureau. An information bureau was organized to determine just how many people were travelling over the highway; where they were going; what advertising they saw; why they took the route; how many miles they travelled on the route; their opinion of the towns along the route; the marketing; the camping grounds; and the treatment received.

Bureaus were opened in towns along the highway, ten of which were active. There were 3,700 cars registered, representing 10,077 people. It is estimated that 5,000 cars travelled the route between May and August, 1921.

Exhibitions. Exhibits were placed at the automobile shows in five cities along the route and also at the American Highway Convention in Chicago, where 2,000 people registered at the booth and 6,000 pieces of literature were distributed.

Publicity Stunts. White Eagle, the Indian poet, rode Red Bird, the little cow pony from Hardin, Montana, to Omaha. This stunt attracted the attention of thousands of people, and much comment in local papers resulted from his trip.

Motion Pictures. A motion picture reel of the Indian's trip was made and a contract signed with the association whereby a New York syndicate showed the reel in the East. Four extra prints were made and started on a circuit from the main office. It is estimated that over 1,000,000 people saw this picture.

Bond Issues. Bond issues were stimulated in counties of the states through which the highway passed by personal visits of the secretary to the different towns to stir up interest.

Bill Boards and Signs. Eight large bill boards were erected calling attention to the features of the route. A typical sign was sixteen feet long, located on a straight piece of road along the railroad, with the words, "Custer Battlefields Highway for the Two National Parks;" this sign could be seen by tourists both on the highway and on the railroad. These signs were found to be particularly effective.

Direction signs were erected at all points where they were needed and painted signs placed on tele-

graph poles and direction posts. These painted signs were coated with varnish for protection.

In re-marking signs, in one trip of nine weeks sixty-two new posts were erected, seventy reset, and 5,000 painted signs on telegraph poles and posts were repainted and varnished.

Material Benefits. It is estimated by the Automobile Association of America that tourists spend \$5 a person each day. The total sum spent by tourists over the highway was estimated at \$470,000, allowing a week's time to cover the highway. Reports from the information bureaus, hotels and garages show that there was an average of forty cars a day during the tourists' season. These tourists were what are known as "cash customers", and merchants and business men found their business very profitable. There is an added advantage, that many tourists buy lands, and homes, and make investment along the route.

Promoting a Large Pageant

In planning the Pageant of Progress—a two-weeks' business exposition, held in Chicago in the summer of 1921—the following methods were employed:

Various portions of the city were organized in districts, following geographic lines, and each one of these districts prepared its own community pageant and held entertainments preliminary to the main Pageant of Progress Exposition. The type of entertainment and the method of selection of

the queen of the district varied in the different localities. Bands, picnics, dances, and parades including floats, the American Legion, Boy Scouts, and High School Cadets were features of many of these community efforts.

A leading newspaper held a contest for the selection of the queen of the pageant from all the districts. In addition each community selected its own queen, prizes being offered ranging in value from \$100 to \$500, including diamond rings, art watches, a ticket to Niagara Falls, cash, savings accounts, etc. The method of selection varied from the merchandise-coupon vote system to the photographic contest and personal inspection method, depending largely upon the residential or industrial nature of the district.

The final selection of the queen was made at the opening of the main Pageant of Progress Exposition. The city was divided into eleven districts, each headed by a district chairman under whose direction new organizations were formed where necessary, new life injected into the weak organizations, and several organizations in each section were joined for necessary work.

The celebrations growing out of the work of these district chairmen included a field day in one district which entailed choral singing, baseball games, field stunts, and other features; in another district a water carnival was staged with motor boat races; and in another a day on which local industries were featured. A four-mile parade was a feature of another district.

During the exposition one day was allotted to each district or special group such as fraternal day, commercial group day, Hungarian day, etc.

Historical and educational phases of the different industries were presented, including the presentation of the history of progress by actual display of the early stage coach, the first engine, and the original, McCormick reaper. The first telephone in the country was shown as the beginning of the vast system now connecting all parts of the country. The woodworker demonstrated his skill in the manufacture of wood decorations. Paper, oriental rugs, shoes, cloth, ice cream, butter and cheese, and many other articles were shown in the process of manufacture. The process of oil-refining was witnessed in every stage, and moving pictures illustrated the steps in the production of a newspaper.

A unique feature of the exposition program was the race between carrier pigeons, an automobile, an airplane, and a motorcycle.

Venetian nights with firework displays, singing in barges around the shore, and picturesque pageantry were features.

Campaign for Rehabilitating a City Water System

In the campaign for the rehabilitation of the water system of Parsons, Kansas, says R. E. McDonnell in *Professional Engineer*, February, 1922, plans, maps, estimates and summaries of the report were prepared on a large scale for use in window displays. About seventy-five stereopticon

slides were made and used at mass meetings and before civic organizations. Municipal band concerts were held outdoors and following the concerts all features of the project were explained—cost estimates, operating expenses, depreciation allowance, bond sinking fund, revenues and rates, with net income, were shown through graphical diagrams. All engineering features were so clearly explained that a prominent attorney, commenting on the project, said: "The engineering is shorn of its technical features and we are now all engineers and see the soundness of the whole project."

The Parsons Sun expressed a willingness to publish a series of water works articles, which were prepared by the engineers. These articles were run daily, many of them being illustrated by views showing both the present conditions of the water works system and the proposed improvements. Over fifty of these articles were prepared and used. They were written, not as a technical journal would use them, but as newsy, interesting items. To test their power to interest readers, an interruption was intentionally made, which caused many telephone calls of inquiry and request for the articles to continue. Some knowledge of the fifty articles may be gained by quoting some of the titles: "Why the Women of Parsons Want Pure, Soft Water," "How Good Health Can Be Purchased," "What Happens When a Water Famine Occurs," "The Cost of a Typhoid Epidemic." A feature of the improvements was a modern water

purification system to displace a very inadequate and antiquated system. Comparative figures were given showing the saving in cost of operating a modern plant, thus showing the voters that they were daily losing money by operating an inefficient plant, besides giving the city an unsafe water to drink. Former bad fires were illustrated, with tables of annual fire losses, showing the fire loss per capita far above that of other cities. Insurance rates were shown to be exorbitant because of the present inadequate protection. Fire losses due entirely to poor pressure were shown to exceed the total bond issue asked. A portion of the improvements consisted of replacing a large amount of small steel and wrought iron pipe, also replacing a flow line of spiral riveted steel and vitrified pipe. The leakage figures were given, showing a loss of over half the water pumped. Exhibits of this worn-out pipe were placed at prominent street corners, with placards giving age, when removed, etc. The per capita cost of the Parsons proposed improvements was shown to be less than that of about twenty-five cities similarly situated.

The generation of electricity for operating low service pumps over a ten-mile transmission line to the River Station and also low service pumps at the City Station, lighting the grounds and stations was a part of the improvements strongly opposed by a private company, wanting to sell electricity to the city. This feature involved a fight for municipal ownership, with all its advantages, to be shown by the engineers. The salesmen with

something to sell in the way of machinery, equipment, pipe, oil engines, and steam engines were very active, making it necessary for the engineers to make an unbiased report on each, and thus forestalling opposition to the bonds.

The publicity campaign through the papers and by personal presentation of the plans before civic organizations continued for four weeks, with an intensive speaking campaign for one week, when twenty-one meetings were addressed, in explaining the engineering, economic, and health features of the project. Noon meetings were addressed when factory, shop, and office employees were reached. Slides were distributed daily to all the picture shows, showing some special features of the improvements. Local speakers were organized and ten-minute talks at all picture shows were made during the closing week. Church announcements were made, calling attention to the necessity of good citizens voting either for or against, but leaving them to form their own conclusions.

The women voters, through the Parsons Federated Women's Clubs, sponsored the final mass meeting, bringing before the women voters the importance of the water supply from the standpoint of health, hygiene, sanitation, beautiful lawns, clean streets, swimming pools, and school and street drinking fountains.

Various business men co-operated and jointly carried full-page advertisements recalling former water famines, bad fires, and showing what the new improvements could offer in the way of securing new industries in Parsons.

Home owners were clearly shown by figures that not a dollar of taxes would be added, but that the revenue would make the plant self-supporting.

The engineers conducting the campaign had the support and active aid of the Mayor, but no aid nor co-operation from one of the Commissioners, and the active opposition of the other Commissioner, until two days previous to the election, when his conversion occurred and the three united in a printed statement favoring the bonds. Other early opposition gradually melted away as the project became understood and those who had opposed came out in print favoring the bond issue. In their articles and talks the engineers refrained from directly urging the voters to support the bonds, but took the position of a disinterested consulting physician to a sick utility, and presented their prescription for the patient in the form of plans, estimates and report, and all features of these were clearly explained, leaving the voters to form their own conclusions how they wanted to vote.

Promoting a County Bond Issue

How a county highway engineer, W. C. Canning, convinced his constituents of the necessity for a \$150,000 bond issue for good roads is told by R. C. Yeoman in *Professional Engineer*, for February, 1921.

After taking office as county engineer he began a study of a road system for the county with a swing about the county seeking information by

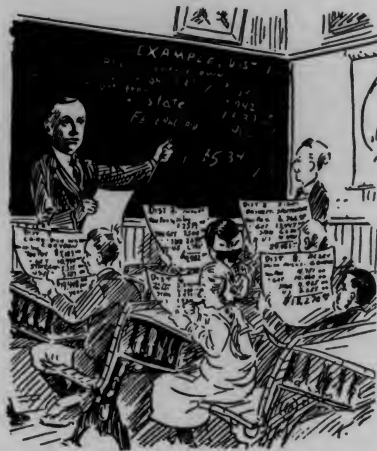
direct observation and consultation with the most interested taxpayers. His sincerity and thoroughness soon won for him the confidence and esteem of all of those with whom he came in contact, particularly the staff of the local newspaper. He soon learned the prevailing sentiment and made his plans to meet conditions as he found them.

The primary purpose of his survey and investigation was to enable him to design a system of road construction and repair that not only would carry traffic but in addition would give as much comfort and convenience as the community could afford. He made a complete study of the sources of material, the geographical location of the roads, the alignment and drainage, the traffic needs and the economic and financial relation of the community to these roads.

He concluded that by publicity he would be able to accomplish his job of convincing the public of the necessity of adopting a sound program. While he was perfecting his plans he wrote items on such economic subjects as the decrease in the value of the dollar, particularly with regard to construction, which were published in the local paper to prepare the public mind for future judgment.

No inkling of his plans was given out until he had complete information on every detail. Then, in a full page newspaper report he presented a complete map and a discussion of his proposal which included not only statistics of existing conditions and an outline of needed improvements, but accurate estimates of the cost of his plan for remedying the road

Poster for a Bond Issue



SQUIRE UTLEY of Smith Mills asks: If we are using all the present levy in taking care of our present roads, how can we take care of the new ones that we build at the end of the five years?

A **STITCH** in time saves nine. For the past eight or ten years, in fact practically ever since our present rock roads have been built, no systematic effort has been made to maintain them. No ditching has been done, no bridges or culverts repaired, and the roads have at no time been resurfaced. The same thing holds good in regard to the dirt roads.

WOODEN bridges have been built and rotted down in two or three years, washouts have been permitted to grow larger from year to year, and mud holes have existed from one season's end to the other. Had some of the money which remained in the county treasury at the beginning of the term of the present administration been expended upon resurfacing and ditching the rock roads, building permanent bridges and culverts, and in proper maintenance methods the present large expenditure of the people's funds in resurfacing roads and rebuilding bridges would not now be necessary.

MONEY saved by penny-wise and pound-foolish policies in the past is now costing the people of Henderson County the same sums twice over in repair and reconstruction work that would have been unnecessary if spent in time.

THE present policy is to resurface the present rock roads entirely within a period of three years, and building anew in a permanent manner the bridges and culverts throughout the county. If this policy is adhered to, within three years the cost of maintaining the present rock roads and the dirt roads throughout the county will be materially decreased, and ample funds will be available to keep all of our roads in a decent condition. For example, the Corydon Road is estimated to cost \$625 a mile per annum for the next three years to put it in a satisfactory condition—after that time the cost of maintaining this road will be less than one-half of this sum.

THERE is where the money will come from to maintain our new roads.

conditions. At this point he enlisted the further help of the county judge and the editor of the local newspaper, who both gave him their ablest support. He followed up his announcement with further newspaper publicity and poster advertising until his plan was so thoroughly "sold" that the whole was accepted at the polls without the change of a word or a figure. The plan covered a five-year program of new road construction and maintenance, embodying a total expenditure of over \$150,000.

The care with which his campaign was planned is indicated by the change of nomenclature from a road tax to a road levy to gain the psychological advantage of eliminating the word "tax."

Another feature worthy of mention was "one minute interviews" from interested taxpayers. Hundreds were asked, "What do you think of the road levy?" The newspaper was glad to have such comment because of its human interest element and the answers were published, to the further benefit of the campaign. This performance may seem small or large, depending upon the experience and location of the reader. Its execution, however, is by no means unimportant.

After the general proposal was published, certain questions came up which were answered in a very complete and decisive manner. A sample of the handbills and posters is shown.

The issue was put up squarely to the voters that it was their adoption of the road levy that would raise the funds to provide a system of adequate highways in the county with their attendant advantages. The people voted yes.

Chapter Engineering Publicity

Typical Examples Selected
from the
Cleveland Engineering Society



By
C. E. DRAYER
(D. P. Clevens, *Nom de Plume*)
Secretary, American Association of Engineers,
formerly Secretary of Cleveland
Engineering Society



CIVIC ACTIVITIES

Big Stick Shown in Building Code. Swat Building Code. Cleveland had been struggling with the revision of the building code. The actual work of revision was done by a joint committee composed of the Chairman of the Building Code Committees of the Cleveland Engineering Society, the Builders Exchange, and the Cleveland Chapter of the American Institute of Architects. The code has been care-

fully studied by the committee and some 460 sections have been revised and 260 new sections added, the City Council turning into law what the committee approved. It was an Herculean task to which these men gave unselfishly of their time without remuneration of any kind.

Experts Sought to Aid in Testing City Employees. Plan Exam for City Engineering Force. The Civil Service Commission asked the society to assist it by taking charge of the preparation and marking of papers for engineering positions. Results to both the society and the Commission have been very gratifying. The Commission secured the services of experts at no cost to the city, whereas during the previous year it had paid some \$900 for examination of candidates for engineering positions, yet complaints had been made that proper relative weights had not been given to experience and theoretical training. The Secretary of the Commission told us that candidates were satisfied after the engineering society took charge. In this case our Publicity Committee tipped off the reporters and they dug up their own stories from the Commission.

Praise Tech Work, But Point Out Faults. Vocational Guide Urged for Pupils. This was our first publicity work, in August of 1912, and is an abstract of the report of the Committee on Technical Education of the Society after it had studied Cleveland's technical schools.

Civic Clubs Unite to Pick Boys' Jobs. Reports a joint meeting of the Engineering Society, Y. M. C. A., and Chamber of Commerce to discuss vocational guidance.

Want Committee for Crossing Plan. The Bridge and Grade Crossing Committees of the society found little had been done in planning the work of grade elimination in the city in a systematic manner and recommended that future work be anticipated in some general comprehensive scheme.

Yale Man to Talk Smoke and other clippings are devoted principally to arousing public sentiment against unnecessary smoke and to induce as many as possible to attend a popular lecture on "How to Burn Soft Coal Economically and Without Smoke," delivered by Dr. Breckenridge at a joint meeting between the Chamber of Commerce and the Engineering Society. The two clippings on the right are the reports of the meeting, which was attended by 600 engineers, manufacturers and citizens. The editorial in the lower left corner was suggested to one of the papers after the editor's attention had been called to the annual report of the smoke inspector, a member of our society. The report was abstracted and recast in newspaper style in a three-quarter column article.



GETTING STARTED RIGHT

THIS shows the story of two annual dinners and our first feature article. The pictures ("art," as newspaper men call it) at the center are of Esselstyn, president of the Detroit Engineering Society; Bell, president of the Engineer's Society of Buffalo; Stucki, president of the Engineer's Society of Western Pennsylvania, and the outgoing and incoming presidents of the Cleveland Engineering Society.

Engineers Vote to Aid Scholars and Engineers May Raise Fund to Aid Students were in the morning papers the

following day. There were two reasons why space was small in the morning papers. One was the late hour at which the banqueters adjourned, allowing short time to get copy in before the last edition of the papers went to press. The other reason was that Mr. Bryan had inconsiderately—to the society, I mean—resigned as Secretary of State on the day of the dinner, taking all of the first page and some of the succeeding ones, besides exciting the reporters. The pictures of the three men in the lower left center were in the advance notice of our annual dinners.

New Gammeter Albatross Aeroplane is Last Word in Speed and Safety was our first feature article and appeared in a Sunday magazine section. In the lower left-hand corner is the advance notice of the meeting, consisting of a picture of the speaker and some 100 words telling about him and what he was to talk about. When we went to the Sunday editor and asked him if he'd like a feature article on flying machines he said, "Yes, only you engineers are too technical." We told him we were interested mainly in knowing whether he was receptive to the idea and that he didn't need to print the article if it didn't suit him. "That's a go," he said.

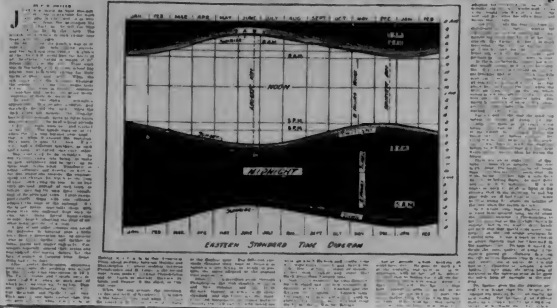
The chairman of the Publicity Committee has been seeking the right sort of an assistant for a long time. When he found a young man ready to attempt the preparation of this article under his direction, he felt about the young man as the editor did toward the article—he might come through, but past evidence was to the contrary. The article was blocked out. The writer came back with a sophomoric composition, a good undergraduate essay. We went over it in detail and he rewrote it, improving it considerably and approaching newspaper style. Again it was given back to him to rewrite. He did it all over the third time and never flinched. The editor was highly pleased. After that our Sunday papers were eager for our feature copy and one article was paid for. Pay had been offered previously, but then we told the editor the material was not for sale. The effect this statement had upon him was worth the sacrifice in money.

WHY NO BOAT CAN WITHSTAND A TORPEDO

C Only Protection Against Such Disasters as Baffled Titanic and Lusitania is Prevention of Collision or Attack. Engineer Shows.



The Whyfor of That Extra Hour of Darkness in the Morning



FEATURING SIMPLE SUBJECTS

Why No Boat Can Withstand a Torpedo. This article is devoted to an explanation of the principles of buoyancy governing the design of ships. By picturing the difficulties an urchin meets in trying to keep a floating tomato can upright until he discerns that he must put some stones in the can, very technical terms like center of gravity, center of buoyancy and metacenter can be introduced without frightening the popular reader. Even an engineer came to us and told us that he enjoyed the article and learned several things from reading it.

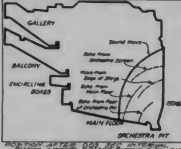
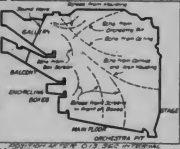
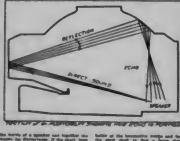
Touching upon the point of timeliness of news, this article was cast for the presses when the Eastland capsized. One of the editors accused us of being accessories before the fact. In defense we would say had the Eastland turned over a week earlier, the caption would doubtless have been different. In this article, as in the gun pointing one, we furnished the text and diagram; the paper, the "filling in." It was syndicated by the paper that published it, but no division of receipts was made with the Publicity Committee. We have since done a little syndicating of our own but not for money.

The Whyfor of That Extra Hour of Darkness in the Morning. For several years a few misguided reformers in Cleveland crusaded to have the city adopt Eastern instead of Central Standard time. The argument is based on the statement that by Eastern time we would go to work an hour earlier and have an hour more for outdoor recreation in the afternoon. The writer took this method of setting before the public the relation of daylight to darkness throughout the year and endeavored to show that one time is as good as another for the measure of the 24 hours, but that the vital thing is to arrange working hours so as to use daylight most economically. The article was prompted by the feeling that it was a duty to set before the people information which he, as a technical man, possessed in order that judgment might be based on fact.

Newest Scientific Discoveries and Remarkable Facts

HOW SCIENCE HARNESSES SOUND AND MAKES SPEAKER HEARD IN HALL

Director of the National Bureau of Standards, U. S. Department of Commerce, has announced that the new method of harnessing sound, which has been developed by the National Bureau of Standards, will be used in the new hall of the National Bureau of Standards, U. S. Department of Commerce, which is now under construction at the National Bureau of Standards, U. S. Department of Commerce, Washington, D. C.

The new method of harnessing sound, which has been developed by the National Bureau of Standards, U. S. Department of Commerce, will be used in the new hall of the National Bureau of Standards, U. S. Department of Commerce, which is now under construction at the National Bureau of Standards, U. S. Department of Commerce, Washington, D. C.

WHAT WORLD LEADERS ARE THINKING ABOUT

How Your Street Should Be Paved U. S. Next in Line on Health Insurance

BY D. P. CLAYTON
BY DR. W. A. EVANS

While the world's leading nations are busy with the problem of how to pave their streets, the United States is next in line to consider the problem of how to insure the health of its citizens.

How the world's leading nations are busy with the problem of how to pave their streets, the United States is next in line to consider the problem of how to insure the health of its citizens.

"Don't Make Bookworms of Children in School"

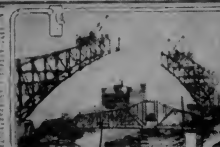
BY GARRETT P. BEAVIS

HOW CLEVELAND WAS PUT ON MAP OF NICKEL PLATE BY PROPHETIC ENGINEER

If it Hadn't Been for J. A. Latta, Railroad Would Not Have Come This Way and the Van Sweringen Could Not Have Bought it for Their Terminal Plans




Wonders Being Worked Right Here in Cleveland on Big High Level Bridge



LOCAL HISTORY INTEREST

How Cleveland Was Put on Map. Valuation work on the Nickel Plate Railroad in 1913 brought to light many events of human interest occurring over a generation ago. The purchase of this railroad by Cleveland men about the time this history came to light furnishes a news peg for the story. The article contains quotations of the "now it can be told" kind, settling authentically many points such as why the road passed through a rival city.

Wonders Being Worked Right Here in Cleveland. When the 591-foot arch was being built, hundreds of citizens stood on the old viaduct adjacent and watched the workmen spin the steel web. Occasionally a question would be asked by some of these citizens, "How do they know the two sides will come together?" The opportunity for a good engineering story to appear just about the time the two parts joined is obvious.

THE ENGINEERING AS A LIFE WORK OF

No. 5--Iron and Steel Making--By S. T. Wellman

THE ENGINEERING AS A LIFE WORK OF

No. 4--Electrical--By W. H. Abbott

The Work of the Engineer—What a Man Must be and Do if He Succeeds

The author of this article is a well known engineer of Cleveland and stands high in the engineering profession. He is president of the Cleveland Engineering Society, member of the American Society of Civil Engineers, the American Society of Mechanical Engineers, and the American Institute of Electrical Engineers. He is also a member of the American Railway Engineers' Association and president of the American Railway Engineers' Association. The article is a valuable contribution to the literature of the engineering profession.

ENGINEERING AS A LIFE WORK

EARLY in our publicity work there was published in one of the local papers a letter from a young man to the editor asking what the opportunities are in civil and mechanical engineering. The editor printed below the letter a request that engineers of each of these branches answer the question. Of course, we are amused that anyone should expect the editor of a daily paper to answer the question, but the asking indicates at once the opportunity to perform public service through the medium of the daily papers.

Here was an opportunity for the Publicity Committee. It accordingly asked the president of the society to prepare an article in answer to the question to be offered to the editor of one of our papers. The editor liked the idea so well that he called for more and the series grew until there were fourteen articles. These articles with a few on the branches not treated in the Cleveland series appeared in book form with the title, "Engineering as a Career."



LOCAL HAPPENINGS

Local Men Will be Prominent in A. R. E. A. Meeting and most of the other clippings in the upper left quarter of the illustration appeared in the section of our papers devoted to railroads. The longest article is signed by the railroad editor, and the text is verbatim as we prepared it.

Railroad Engineers Conclude Convention was a telegraphic report sent from Chicago, press rates collect, to the Cleveland papers after one of the railroad editors had suggested that we report the convention in this manner.

Favors Unit Plan of Concrete Work. Here again are shown advance notices appearing on Monday preceding the meeting and a write-up of the lecture appearing on the Sunday following. The section of the Sunday paper in which this story appeared went to press on Friday night. In this instance copy was handled by the real estate editor who was also movie editor, although the duties of either job would keep one man comfortably busy. Copy presenting recent development in building construction eased the labors of the real estate editor and was given a hearty welcome by him.

The two clippings to the upper left in this group are the advance notices. When we came to write the one which is straight reading matter, we got down our cyclopedia and discovered some interesting things, one of which was that a Clevelandler while in Congress had a hand in the formation of the Weather Bureau. This, and several other interesting points, were ancient history, unless there could be found a "news peg" to hang them on, that is, to justify them. The new weather man and his lecture was the peg.

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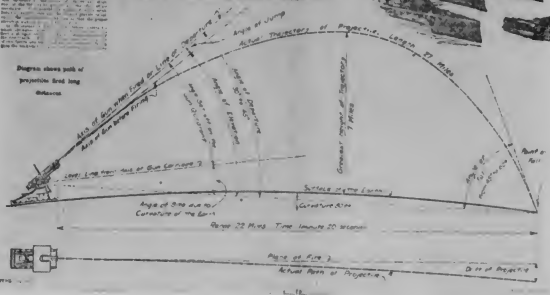
How Science Harnesses Sound. So many great auditoriums have been acoustic failures that it is popularly supposed audibility is beyond the ken of science. When Dr. Dayton C. Miller, a recognized authority on sound, after Cleveland had voted \$2,500,000 for a municipal auditorium, told us that the behavior of sound could be known accurately in any building as soon as the plans were drawn and before a building stone was laid, it became our public duty to voice the demand that an acoustic expert be consulted in the design of this great auditorium.

Burrowing Under the Lake. There is a world of romance, adventure, and danger in digging a 7-foot brick tunnel extending 7,500 feet under the lake through clay containing gas pockets in order to bring potable water to a thirsty city. No soldier of fortune on the frontier of civilization must be more alert than the driver of the two-foot gauge locomotive propelled by 1,200 pounds air pressure in its massively-plated tank. Shirking responsibility would insure his attendance at his own funeral. The appeal of such a story is universal.

HOW GUNNERS PICK OUT THEIR TARGETS THOUGH FAR AWAY

Cleveland Engineer Explains How Operators of Giant Weapons Must Fire Carefully in Sending Shells to Right Places.

When a gunner aims a shell at a distant target, he is not merely pointing the barrel in the direction of the target. He is also calculating the time it will take the shell to reach the target, the distance it will travel, and the angle at which it will fall. This is a complex task, and it is one that requires a great deal of skill and knowledge.



FEATURING A TECHNICAL SUBJECT

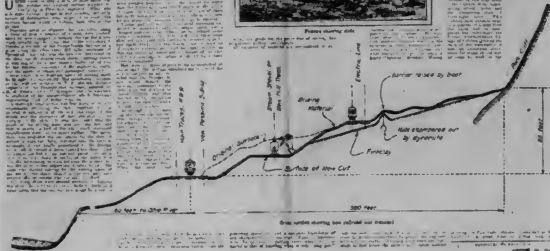
ANY plan for publicity by engineers must be based on a systematic scheme to educate the public, and from the standpoint of the engineer, the public includes the men who make the newspapers.

SAVING A RAILROAD FROM BURIAL

Engineers Solve Difficult Problem When They Halt Earth Slide by Blowing Up Stratum Which Insists on Slipping



The problem of the railroad engineers was a difficult one. A large mass of earth and rock had begun to slide down a steep slope, threatening to bury the railroad tracks. The engineers had to find a way to stop the slide before it reached the tracks. They decided to blow up the stratum which insisted on slipping.



SOLVING UNUSUAL PROBLEMS

THE ability to meet new conditions with new methods is an ordinary attribute of the engineer. This article describes how a railroad engineer stopped an earth slide by blowing up the stone under sliding earth.



Cleveland Engineers for Peace. The Good Will number of the Journal of the Society is an argument for universal peace, but makes no reference to the great cataclysm in Europe. It is based on the idea that modern war is a mathematically scientific game, played with deadly machines evolved by the engineer. With the same scientific principles in mind, if the efforts spent in war were turned to the work of peace—in peaceful rivalry instead of destruction—a tremendous advance in human welfare would be the result. The Publicity Committee sent copies of the Good Will Journal over the country, wrote reviews of it for periodicals and distributed several hundred copies to citizens of Cleveland, and placed them in downtown offices of physicians and dentists, libraries and the like, where they would be read by many people. The review was published verbatim as the committee prepared it.

Engineers are the Men Who Make Dreams Real. This article was suggested by the publicity committee to one of the sub-editors who was charged with writing an interesting story for each Sunday. Naturally, the most difficult part of his task was to find a subject and material. We arranged for an interview with an engineer who could talk in an interesting manner to a reporter. The definition of "engineer" the newspaper evolved is rather apt. "An engineer is a man who somehow, some way, tames the forces of nature, helped by science, and makes them do man's bidding."

Electrified Railroads Bound to Come in Time. At a time when the electrification of railroads entering Cleveland was being agitated, the engineering society invited N. M. Storer, of the Westinghouse Electric & Manufacturing Company, to lecture on the subject. The meeting was held at Case School and was attended by several of the city officials. The clippings are the advance notice and abstract of the lecture appearing on the Sunday following.

Engineers See Wonders of the Press Plant. On Tuesday evening, our regular meeting night, we had three newspaper men tell us about the making of a newspaper. One spoke from the standpoint of the editor, a second about the business and advertising end, and a third, a member of our society, gave the principal address which was devoted to the power presses and other machinery of a newspaper plant. On the following Saturday afternoon we visited the three plants in the city, each within a few minutes' walk of the others. The Press took our pictures just after we had started through the building and in forty-two minutes had the paper printed ready to hand to us as we left.

U. S. Engineer Speaks Friday. Of the two talks mentioned in this notice, the efforts of the Publicity Committee were directed to making the one at Epworth Memorial Church on Sunday night a success. We had notices posted on the bulletin boards of various civic organizations and had announcements made where practicable. We were gratified to see an attendance of several hundred on an especially inclement Sunday night.

Engineers to See Pittsburgh Plants. A very pleasant and profitable custom of visiting back and forth has grown up between the engineering societies of Pittsburgh, Buffalo, Detroit, and Cleveland. I am inclined to place greater value on the social and good fellowship part of these programs than on the professional benefit gained from visiting plants in other cities, large as that may be. Trips by boat are effective in getting members acquainted with each other, out of which grows a common interest.

Will Show Lightning's Fury was part of an advance notice of a popular lecture in East Technical High School by E. F. Creighton, consulting engineer of the General Electric Company. When we gave a duplicate of this picture to one of the papers, the city editor said it wouldn't justify reproduction. He said it was too black. When we showed the picture to the competing paper, we mentioned diplomatically that the editor of the other paper was afraid there wasn't enough contrast. The editor being addressed said, "Let us try it." The graphic quality of the notice without the picture needs no comment.

Yale Summons Local Engineer is a notice that one of our distinguished members was to give his lecture on "Engineering of Men" at Yale. Below that is an item informing the public that former Senator Burton has given his library of river and harbor literature to the local society. Next is an item telling of an event in our chess club when seventeen of its members were pitted at one time against a well known champion.

Cable Long Used Bears 300 Tons is an account sent to us by one of our advertisers in the Journal. It is a legitimate news item and good publicity for our advertisers and properly falls in the scope of our Publicity Committee's work.

Bridge Foundations a Mighty Problem properly may be classified as service to the community. The building of the foundations of a great high-level bridge, the main artery between two parts of the city, gave rise to a lively controversy as to their safety. The public had a right to know the truth. The county bridge engineer was asked to read a paper before the society describing the foundations; his paper was abstracted with technicalities omitted or so worded as to be understood by the reader of average education, and published in one of the papers on the Sunday following the meeting.

Producer Gas to Eliminate Smoke and Save Fuel. Here are shown an advance notice of the meeting and an abstract of Dr. Fernald's paper as it appeared on the Sunday following the meeting. Dr. Fernald was pilot of the Cleveland Engineering Society when its course was changed from a jack-in-the-box mutual admiration society to a wide-awake civic and professional organization.

Developing a Local Engineering Society

The editors at the head of the several newspaper departments, real estate, railroad, finance, marine, Sunday, each have different needs which vary somewhat with each paper, said C. E. Drayer, formerly secretary of the Cleveland Engineering Society, in a talk before the Engineers' Club of Philadelphia. For instance, the real estate editor on one paper was also movie editor, and the railroad editor of another wrote Sunday copy on minor theatricals. Gradually the special needs of the several departments may be learned and material supplied accordingly. To illustrate, the railroad editor has Sunday off, yet Monday column must be filled. That is, on Saturday he must do two days' work for Sunday and Monday. News that can be held for Monday will be invariably welcomed by him.

When we started publicity work, we interviewed the managing editor of one of the papers who was an acquaintance. By going to the editor and talking over the idea of a story, we not only obtained the benefit of his council but we learned that when he had approved the central idea and helped in its development, copy of that story was in a way to succeed even against scarehead competition. When one article is handed in it is well to have the idea of another or two to submit for opinion and thus avoid the noticed effort to see a busy editor, or the chagrin of an unsuccessful call.

Study the style of the papers. To get the style, let the writer clip a few articles that seem especially good and have them before him while he prepares

his copy until the style comes. Get a good first sentence of "lead" to attract attention and guide the reader into the story. Particularly in advance notices, aim to answer the questions, what, when, where, in the first sentence. Writing of head lines may best be left to the practiced newspaper man.

It would be much better to have nothing in the paper because of inability to prepare copy suitably than to have it refused. Lots of material is offered to the papers in form unsuitable for publication and, unless it possesses unusual news value, it goes into the waste basket. All copy should be typewritten and clear, for time is a vital element in getting out a paper.

To summarize, the successful preparation and placing of copy depends upon three things: (1) news merit, (2) acquaintance with the editorial staff, (3) an understanding of the problems of newspaper making.

Now to find the man with a "nose for news." The ability to pen expressions that fit the average mind will come with practice and a study of psychology, just as the ability to design comes with practice and a knowledge of the laws of mechanics. Of course, aptitude varies in one as in the other, but what is essential is an abundance of faith in the cause.

There are certain definite perquisites of publicity which accrue to those undertaking the work. Of these perhaps the most valuable to the individual is the opportunity to become acquainted with the leaders in the profession and to become a dynamic

force among one's associates and in the community. The call of your society is for those able to do useful work for it.

Another advantage to those who tell about what others are doing is found in the broadening of the knowledge of him who tells the story, for to write about a technical subject so that it interests the least educated as well as the most educated in the community, requires that there be no haziness in the mind of the writer. To the man who is looking forward and not back, who has the spirit of service to those in the profession and to the entire community, here is an opportunity of wonderful possibilities. Examples of such work in the Cleveland Engineering Society are illustrated on other pages.

There are several ways that may be used by engineers to educate the public besides the public press where an unsympathetic editor may inhibit our efforts.

We planned in Cleveland to enlist a few of our younger engineers to give illustrated lectures on engineering subjects before small gatherings in churches, schools, libraries and the like. It is hoped that a sympathetic understanding of engineering knowledge and skill can be brought about more quickly by a personal contact of this sort. In addition, the speakers will gradually acquire by practice that facility of expressing on their feet which is necessary in order that we may argue on equal footing before legislative bodies or large gatherings of citizens subjects in dispute.

ILLUSTRATED LECTURE

"Our Northern Neighbors"

— BY —
CAPT. J. MILTON STATE

UNDER AUSPICES OF PONTIAC CHAPTER
AMERICAN ASSOCIATION OF
ENGINEERS



HIGH SCHOOL AUDITORIUM
APRIL 14, 1922
8.00 P. M.

Front cover of a four-page folder used to advertise a chapter lecture.

APPENDIX I

SOME APPROXIMATE ESTIMATING COSTS

The costs given below are those existing in Chicago, Illinois, in January, 1922; they are approximate and should only be used for rough estimating.

Addressing and Typewriting Costs

	Per 100	Per 1000
*Envelopes addressed, pen.....\$	.75	\$5.00
Additional lines, pen.....	.25	1.00
*Envelopes addressed, typewriter...	1.00	7.00
Additional lines, typewriter.....	.25	1.50
Filling in—1 line, name only.....	.75	5.00
2 Lines, name, town and state....	1.00	7.00
Additional lines	.25	1.50
Addressograph addressing	.40	3.00
Signatures signed with pen.....	.45	3.00
Signatures printed (500, \$1.50)....		2.50

Folding and Mailing

	Per 100	Per 1000
Fold, enclose and seal circulars...\$	.40	\$2.50
Fold, enclose, seal "filled in" letter	.50	3.00
Folding letters, per fold.....	.10	.50
Machine folding (Min. \$1.00)....		.75
Stamping and mailing.....	.15	1.00

* Price includes prefix, name, town, state, and street or rural address where given from legible lists without selection. Additional charge where more than usual writing is required and for unusually large or heavy envelopes and printed matter.

Enclosures	.10	.50
Typewriter ribbon to match.....		.75

Multigraphing

(Imitation Typewriting)

Copies	25 Lines	30 Lines	40 Lines
250	\$3.50	\$4.00	\$5.00
500	4.00	4.50	5.50
750	4.50	5.00	6.00
1,000	5.00	5.50	6.50

Additional copies at \$2.50 per 1000.

Add 10c per line for composition in excess of 40 lines.

Mimeographing

(Improved Dermatype Process)

Copies	25 Lines	40 Lines	60 Lines
100	\$1.25	\$1.50	\$1.75
250	1.50	1.75	2.00
500	1.75	2.00	2.35
1,000	2.50	2.85	3.25

Additional copies at \$1.50 per 1000.

Price List for Printing

The Printers Exchange believes in standard price lists, and recommends to every printer that he buy and study the one most used in his locality. But many of the smaller shops do not feel that they can afford to pay for regular expert service.

	100	250	500	1,000	2,000	5,000	10,000
N. H., Memos, Starts \$2 per M	\$3.25	\$4.00	\$5.00	\$7.00	\$10.75	\$21.00	\$36.00
Letter Heads, \$2.50 per M..	4.00	5.00	6.50	9.50	15.00	31.00	54.25
Envelopes, \$2.50 per M	2.00	2.75	4.25	7.00	12.00	26.25	48.75

Business Cards, Tickets, \$2 per M	2.25	3.00	4.25	6.75	11.00	23.75	42.75
Window Cards, Hangers, etc., \$2.50 per C..	10.25	15.00	29.25	52.00			
Hand Bills, 6x9, print paper .	3.00	3.50	4.25	5.50	8.25	14.00	20.75
Sale Bills, 11x16, print paper .	4.75	5.50	6.75	9.00	13.25	25.75	43.25
Folders, 4 pg., No. 1	12.15	13.25	15.25	18.75	23.75	38.50	61.75
Folders, 4 pg., No. 2	20.40	22.00	24.75	28.75	36.00	56.50	87.75

All the above are priced for the usual amount of work. When copy is unusually easy or complicated, additions or reductions should take into account composition only.

Note Heads, Memos, Statements, may all be figured practically the same, only taking into account the difference in the cost of stock.

Envelopes, all sizes up to No. 10 may be figured alike, taking into account difference in cost of stock.

Cards and Tickets, up to size 36, and including calling cards, may be figured the same, considering cost of stock.

Window Cards, Hangers, are based on the cost price of \$2.50 per hundred (about the cost of 6-ply quarter sheets.) For 25 of them charge \$5.70; for 50, \$7.20.

Folders, No. 1, refers to size suitable to use in 6 3/4 envelopes, and No. 2 is size for No. 10 Envelopes.

Estimating

The above list of prices may be used for almost any kind of work coming into the average printshop by applying the following suggestions in estimating variations:

Stock. Do not figure cost of stock at the supply house. Add the cost for freight and drayage. When you estimate all the items in making a price, allow 20 per cent for handling, spoilage, etc., but do not add this to the cost price in using above table, as it is considered in the table. It is a good plan to add freight and drayage when you mark stock, so that "cost" includes them, as it should.

In estimating prices per hour, figure hand composition at \$3.00 per hour; machine composition, \$4.00 per hour; platen press, up to 10x15, \$2.50 per hour; 12x18 and larger, \$3.00 per hour; cylinder press, \$4.50 per hour. These are selling prices, not cost. Of course these figures are based upon efficient work. If you have cheap blundering help, your customer should not pay these prices. On the other hand, absolutely perfect work without delays or accidents is unattainable, and you cannot figure upon the expectation that every job will be completed in the minimum time, without mistakes. These prices are based upon fairly competent and careful workmanship, with about the usual loss of time and material from unavoidable accidents, mistakes, and delays.

THE PRINTERS EXCHANGE,
Ottawa, Kansas.

APPENDIX II

A Brief Outline of a Working
Plan for
Public Information
to Broaden the Field of Engineering Work
together with
Suggestions and a One-Year Working Plan
for
PUBLIC INFORMATION WORK
by the
AMERICAN ASSOCIATION OF ENGINEERS

A Report to the
ADVISORY BOARD OF PROFESSIONAL ENGINEER
Prepared by
CHARLES R. THOMAS
in charge of Public Information

AMERICAN ASSOCIATION OF ENGINEERS
63 East Adams Street, Chicago
November, 1921

Summary of Plans

1. A Bureau of Public Information is to be established by the Association and the chapters asked to participate in a systematic program of public information for the advancement of the engineering profession.

2. A limited number of subjects for concerted publicity are to be selected. Members of the Association will participate by delivering addresses, preparing articles, and similar work.

3. The cost of initiating this plan is estimated at \$7,500 for the first year.

Working Plan for Publicity

The purpose of this report is to:

1. Present a clear analysis of the purpose and aims of engineering publicity and to show the relation of such publicity to the main objects of the American Association of Engineers.

2. To provide suggestions which can be used as a guide by the Association in outlining a publicity program and to discuss methods by which increased and better publicity leading to the advancement of the profession may be obtained, and also suggestions as to how undesirable publicity or publicity that savors of notoriety may be avoided.

3. To present a general working plan for a publicity campaign to extend over a period of one year to the end

- (a) That the field for engineering work may be broadened;

- (b) That the public may be supplied with accurate information at all times about the ideals and principles of the engineering profession;
- (c) To bring about the constructive development of the Association by extending the knowledge of the principles of the Association into new communities; and to correct wrong impressions about the Association.

BROADENING THE FIELD OF ENGINEERING WORK

Statement of Problems

The conditions that have existed for the past ten years demonstrate the need for broad general publicity work on the part of engineers. The following truths are self-evident:

First. There are more engineers in the United States than there is engineering work in the sense that engineering work is commonly accepted. Therefore engineers are frequently unemployed. The solution is to so broaden the field of professional engineers that their training will be available in many other kinds of work.

Second. Engineers as a profession have been more interested in the technical side of their profession than they have in the human side or in their relations to other men, commonly known as the business side of the profession. Professional work is no mystery and it is probable that engineers will not change much. But it behooves the profession as a whole to broaden its confines and to extend the field of operation for the members who follow it for a livelihood.

Third. As a result of the conditions above stated engineers have been exploited. That is to say they

have worked for less pay than they should work for, considering the value of the work that they do. This condition is of course temporary. Twenty years ago the engineering profession was one of the best paid professions, but since then the number of engineers has increased out of proportion to the scope of engineering activities. The real answer is: either decrease the number of engineers or increase their field of operation. The latter course is preferable. The late war gave a great impetus to broadening the field for engineers. We must continue this movement and perfect it. This is one of the big objects of *Professional Engineer* and it is working to that end continuously.

Fourth. There is a lack of systematized and co-ordinated effort in informing the public about engineers. This lack of co-ordination the Association has attempted to correct. Every man in the American Association of Engineers should be a publicity man for engineering as a profession. There is, however, a lack of co-ordination of the work of the Association with that of the older and wealthier organizations. We should strive to correct this defect and interest them in the work we are doing.

The purpose of a publicity plan for the Association must be first, to improve the social and economic welfare of engineers; second, to stabilize the ethical standards of professional engineers and to increase the usefulness of the engineer to the public. These are the basic objects of the Association. To accomplish these ends it is necessary to consider the welfare and the accomplishments of engineers as a product which must be sold to the greatest possible number of people, the idea being not to derive any direct profit but rather to acquaint the

public as a whole with the work of engineers. There are 110,000,000 people in the United States and 200,000 of them are engineers. Our object is to make every one of the 110,000,000 familiar with the constructive work that engineers are doing or are capable of doing. The accomplishment of this purpose is not a matter of mystery; there is no mystery about modern methods of publicity and advertising. Such work has been accomplished for organizations similar to the American Association of Engineers, including the Red Cross, The American Legion, the Rotary International, and many other large organizations of the country.

The Ultimate Objective

The ultimate objective of publicity work for the Association is an ideal—the development of engineers to the point of highest public usefulness. We can never become perfect, but we have a long way to go before we begin to reach the limits of practical publicity approaching this ideal, which is summed up so concisely in the objects of the Association as stated in its Constitution. It is readily seen, therefore, that it is not the work of one year or ten years. Any publicity campaign must contemplate a graduated process of public education, and we should select immediately those things which are most pregnant and develop others as we get results from those first selected. The task is not a small one but the object is worthy of our highest efforts.

HOW PUBLIC INFORMATION MAY BE DEVELOPED

Publicity Defined

Engineering publicity is considered in two broad divisions: Publicity or public education about engineering work in general, and publicity or public education about the work and aims of the American Association of Engineers.

Publicity about engineering work includes the presentation through newspapers, magazines, public addresses, motion pictures, signboards, etc., of information concerning the work of all engineers, using the language of that portion of the public which is addressed. The object of such publicity is to broaden the field of engineering service.

Publicity about the American Association of Engineers includes the supplying of information through dignified and acceptable channels of publicity about the work and aims of the Association to the end that the influence of the organization may be increased and that good will may be created toward the Association in the minds of all engineers and the public in general.

These two broad classifications of publicity work are recognized in the rules for the publicity contest for 1922, as stated in the September, 1921, issue of *Professional Engineer* as follows:

"Publicity must contain the words 'professional engineer' or the words 'American Association of Engineers'"

It is believed that all Association publicity should be subject to the broad test of improving the social and economic welfare of engineers and improving the status of the engineers from an ethical standpoint, for thereby the public is benefited—does the proposed publicity make the engineering profession more worth while to the public.

It is believed that a general plan of multiplying news sources should be followed with the greatest possible freedom from censorship. Sincerity of purpose will rise above the small errors of judgment that might be eliminated through censorship.

As a by-product of this broad plan for helping engineers we shall be able to benefit the Association. The growth of the Association in the past six years has been rapid and many engineers have wondered and inquired what the Association was and what it was seeking to do. They have asked questions about the Association. Is it seeking to dominate the engineering profession? Is it trying to displace the older technical societies? Is it composed principally of young and untried engineers who are seeking to form a union to get their pay raised? Is there any reason for the existence of such an organization in view of the number of engineering societies already in existence? What are the relations of the Association to the Engineering Council? Where are its members located, and what have they done? In short, what are the motives behind the formation of the American Association of Engineers and what reason has it for existence—what has it accomplished?

The answer to all of these questions may be clear in the minds of members of the Association, although I doubt it very much. It is almost certain that 99 per cent of the 110,000,000 people in the United States could not answer one of the questions. It is readily seen that there is an enormous field for educational work, and since the Association is new to nearly everyone in the country it is easy to make it of interest to them through publicity, because what is new is essentially the basis of news.

But any publicity and benefit to the Association as an organization of forward-looking professional men must be subordinated to a larger plan of helping all engineers.

Publicity Must Be Continuous

Publicity to be effective must be continuous. The conviction that results from continued publicity is based upon repetition. The value of cumulative effect of continued publicity has been firmly established through the experiences of many colleges, associations, and business institutions. Looking at publicity from a business standpoint it is necessary to lay out a program which will extend over a period of at least two years; a period of one year is a minimum.

The Market

As before stated, the market for the work of engineers includes the population of the country—

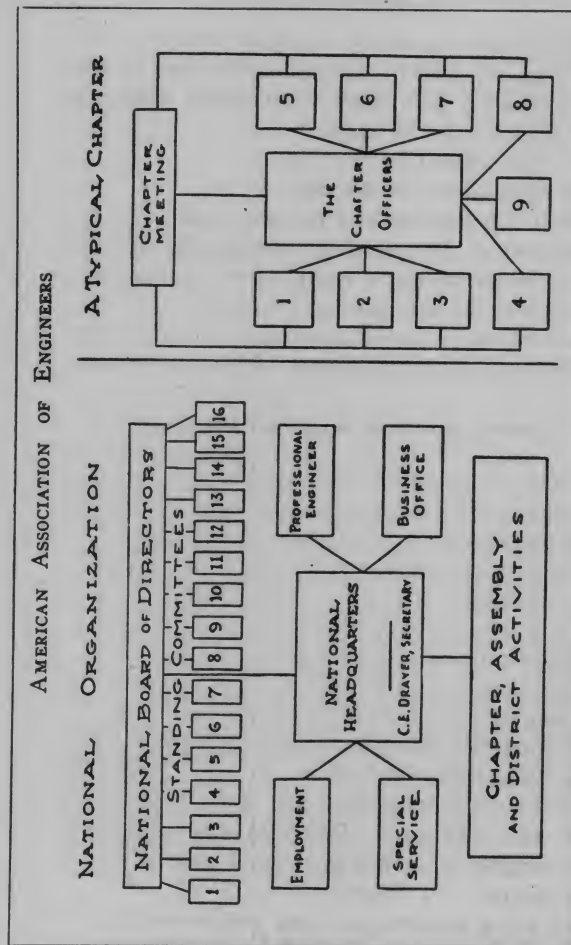
and more than that the whole world. To this market the work of engineers must be sold as a commodity and a favorable mental attitude toward engineers created.

Competition

It must be remembered that engineering is not the only profession interested in obtaining the support of the public, and it must also be remembered that within the engineering profession there are numerous organizations each seeking to advance the interests of its members. It should be the object of the American Association of Engineers to co-operate with all other engineering organizations to the fullest extent where the interest of all engineers is concerned. The keynote of a general campaign should be for the benefit of the whole engineering profession, of which the American Association of Engineers is a typical cross-section. The Association stands as a great democracy of engineers of which any man honorably engaged in professional engineering work can become a member, and in fact should be a supporter whether he is a member of the Association or not. All that is necessary is to show any public-spirited engineer that an organization of this type exists and he will undoubtedly give it his support. This is the basis of the growth of the Association in the past and it must continue to be the basis for its development in the future.

Plan of Publicity Must Be Comprehensive

Any plan of publicity must be complete. It must



1. Professional Engineer. 2. Chapter Activities. 3. Employment Service. 4. Judges of Election. 5. Political Policies. 6. Railroad Council. 7. Auditing. 8. Classification of Engineers in Teaching. 9. Legislation. 10. Practice. 11. Salaries for Engineers in Teaching. 12. Application of Ideals and Objects. 13. Educational Department. 14. Public System. 15. Services and fees of Practicing Engineers. 16. Qualifications.

1. Executive. 2. Auditing. 3. Civic Fellowship. 4. Membership. 5. Political Policies. 6. Publicity. 7. Program. 8. Qualifications. 9. Qualifications.

include all the commonly accepted means of publicity that are used by common-sense men in such work. Such a plan must contemplate using the three broad types of appeal:

1. The appeal to the eye.
2. The appeal to the ear.
3. The appeal of the printed word.

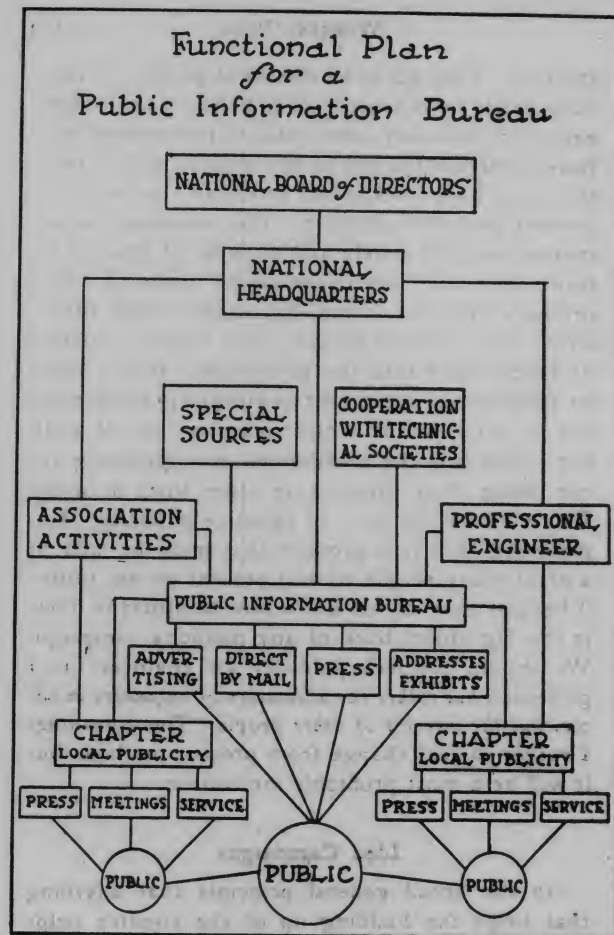
The first is an appeal by illustrations and pictures. The second is an appeal by the spoken word. The third is through the printed word.

The breadth of appeal possible is shown on page 42. The varied types of appeal are given on page 69.

Newspaper and Magazine Publicity

In any campaign of publicity through the use of the printed word the newspapers represent the first wave of offense, for newspapers carry the tidings of the day and stories of all kinds can appear in these mediums. The second wave of offense in the plan of public education are the popular magazines. These are the machine guns which spray concentrated ideas upon the public in such a way that they are continually hearing about engineers. The third wave of offense, or the artillery, are our technical magazines which back up with irrefutable facts the statements that are made through the other two mediums. Technical magazines stimulate engineers; newspapers and general magazines educate the public.

For these reasons anything and everything can go in the newspapers which are used to create



A proposed functional organization for public information work by the American Association of Engineers.

interest. They go to all classes of people. Everybody reads newspapers. It is believed that engineers more than any other class of professional men have neglected the use of newspapers and in doing this they have overlooked probably the most important phase of publicity. But newspaper information must be timely and must be of general interest, and therefore it cannot be technical. The ordinary engineer, some say, cannot think otherwise. It is believed he can. It is largely a matter of education within the profession. But it must be emphasized again that engineering work must not be portrayed as a most pleasant sort of work but rather that the possibilities of engineering are not being fully utilized in other lines of work. This must be the basis of effective publicity. Engineering skill is a product that must be sold to a great many people who at present do not utilize it because they do not know how to utilize it. That is the big object back of any publicity campaign. We should not seek publicity for engineers as a profession *but rather the utilization of engineers in advancing the interest of other people*. This constitutes a rather radical change from present methods but it will be a most profitable innovation.

Idea Campaigns

On the broad general principle that anything that helps the building up of the country helps engineers, provided it is along the lines of work which engineers can handle profitably, support

should be given to non-professional campaigns, such as the "Build Now," "Save the Surface," "Fire Protection," "Pave the Streets," and "Own Your Own Home" campaigns. The engineer is the logical man to inaugurate such work because it affects his livelihood; and he is also one who is trained to see what people need along these lines. The recent work of the Missoula Chapter of the Association, which won the publicity prize for 1921, is characteristic of this type of work. This Chapter held an Engineers' Week which was very successful. The Engineers' Week idea is probably a little too direct; I think it better to emphasize a more general idea and in that work to direct attention to the value of engineers along lines in which they are not now engaged.

National Advertising

Advertising campaigns such as have been inaugurated by the Association of Railway Executives, the American Association of Engineers, the Red Cross, and the Young Men's Christian Association are valuable and effective, but they are very expensive. Some paid advertising, however, is essential to fill in between human-interest appeals in the editorial columns of various publications. The weakness of publicity work, which depends on the printed word and the whims of editors, is that there are periods in which continuity of appeal is lost. These periods should be filled in by the use of paid advertising.

Use of Emblem

A suitable emblem is essential to any well-organized plan of publicity. In this we have the Monad which has already been extensively used by the Association. As a first step the use of the Monad should be encouraged and brought into vogue in as many ways as possible. I believe that a large part of the lasting publicity that has been obtained by the Association in the past has been due to the very effective use of the Monad but much more can be accomplished. Emblems become indelibly stamped on the minds where words are often forgotten.

A slogan is also suggested for use by the Association.

Outdoor Displays

By no means can the imagination be stimulated so successfully as by the use of the painted sign, printed poster, or picture panel. The use of such displays would be a radical departure in information work of engineers or any profession, but I feel sure that they can be used successfully. We have a very good example of this work in the effective Red Cross display work. A plan of outdoor displays might be tried out in a selected territory or on space selected along railways that will reinforce the message that is being delivered through other public information mediums.

The use of outdoor displays by Rotary Clubs is illustrated on page 30.

Direct Advertising

The work in direct advertising consists of the preparation and distribution of printed literature of various kinds to the publicity departments of railroads, public utilities, news agencies, large advertising agencies, and large organizations which are interested in the development of a field for professional engineers.

Pictures

A tremendous audience can be reached through the utilization of photographs and motion pictures. Such pictures should truthfully portray the work of engineers and give due credit where credit is due. This means co-operation with photographers and motion picture producers in a constructive way and also a certain amount of censorship. The Public Information Bureau should have available a duplicate photograph file and a number of motion picture films which could be used to educate the general public and correct mistaken impressions as to the type of work engineers do. The information bureau might also become a producer of certain motion pictures and furnish films to educational institutions and vocational schools. Such pictures should not show engineers as people who are most fortunate individuals but rather the various kinds of work done by engineers and what can be accomplished by engineers.

Members should contribute interesting photographs of engineering work to help build this file.

Bulletins and Books

Bulletins and books of general value to the profession should be published and sold at cost. A promotional association must of necessity have many publications.

The forthcoming report of the First Engineering Conference on Public Information to be called "Publicity Methods for Engineers" will be the first book offered.

Organization of Public Information Bureau

The organization for public information is shown in the accompanying chart on page 178.

One Year Working Plan

The elements of the plan are:

1. Establishing an Engineering Public Information Bureau in Chicago.
2. The selection of not to exceed six national publicity activities to be promoted by concerted action of all the chapters.
3. Assignment of a particular time for the promotion of each publicity project, as for example, selection of one month a year for promotion of one activity, to be followed by another month for the promotion of another activity.
- 4a. The division of each publicity project into component parts, selection of subjects, and assignment of men in the different parts of the country to prepare short articles on the subjects.
- 4b. The collection of certain publicity material at one central point as at National Headquarters for editing and for placing in various publicity channels.

- 5a. Preparation of short articles by prominent members for use as publicity material and distributing this material to the various chapters.
- 5b. Placing of these publicity articles by the various chapters in commonly accepted mediums and tying up local activities with broad policies outlined.
6. Co-ordination of publicity activities with those of other organizations interested in the welfare of engineers.
7. Follow-up of publicity by chapter action on legislative matters and on local affairs in the community.
8. Division of the cost of national publicity between the various chapters and units of the organization.

Public Information Projects

The following publicity projects are submitted as being of broad public interest and adaptable to almost all communities:

1. The development of construction activities.
2. Municipal engineers as business men and the protection of public health.
3. Licensing of engineers as a protection to the public.
4. Making one dollar do the work of two by the elimination of waste through engineering skill.
5. A survey of community needs in the way of public improvements in many different communities.
6. The engineering features of transportation.
7. Expert service in government administration.

Each of these subjects can be treated in an infinite number of ways and presented to the public

in such form that interest in the work of the engineers will be created.

It is believed that more lasting and therefore better results will be obtained in improving the status of engineers by taking a positive constructive viewpoint as outlined above rather than by emphasizing the inadequacy of engineering pay and lack of appreciation by the public of the work of engineers.

Just What Do the Chapters Get

The advantages of this plan to the chapters and members of the Association may be briefly summarized as follows:

1. Broadening the field of activity of all engineers.
2. Increased prestige of engineering profession.
3. Co-ordinating local with national public information.
4. Aid from the central Public Information Bureau at National Headquarters approximately as follows:
 - (a) Printed matter for local distribution and membership work—free to a limited extent; large quantities at cost.
 - (b) Placing of articles for members in proper magazines at cost.
 - (c) Motion pictures and slide service.
 - (d) Posters at cost.
 - (e) Advertising service and advice for chapter.
 - (f) Monthly Service Letter for clip sheet.
 - (g) Lecture Bureau service.

Until the Bureau begins to function actively it is difficult to predict what other lines of service will develop.

Results to Be Expected

The principal result to be expected from organized public information work is the advancement of the engineering profession and the consequent betterment of the welfare of the individual engineer. A growth in strength and prestige of the Association will be a by-product.

Research Information Service

THE ultimate plan of the Research Information Service of the National Research Council, should include the establishment of a great general clearing house, with branches in all of the advanced nations of the world as a means of protection against loss of valuable information.

Few needs are now clearer or more urgent than efficient informational mechanisms or keys to knowledge.

Why should we not handle the packing, storage, shipping, and distribution of knowledge as efficiently as we manage commercial production.

Largely because knowledge is discontinuous and relatively unavailable, history repeats itself endlessly and tragically. Ignorance, it would appear, is responsible for more catastrophies and racial set-backs than are carelessness, selfishness, and maliciousness combined.

The solemn duty rests upon us to devise adequate ways and means of carrying forward always, with continuously increasing accessibility, the sum of useful knowledge and experience.

The program of the Research Information Service is: To develop initially a general, public use of such a service.

To develop complete machinery for gathering, classifying, locating when needed, and disseminating trustworthy information.

To utilize every available agency of communication to meet the needs of individuals or organizations in need of information.

CHARLES L. REESE,

Chemical Director, E. I. du Pont de Nemours Company.

Extract of a talk
before the American Chemical Society.

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National conference on public
information, 1st, Chicago, 1921.
Publicity methods for engineers

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